PC 70

My name is Maxine Agayar. I am from Alakanuk. I grew up with both subsistence and commercial fishing playing an immense role throughout my life. I commercial fished with my dad for years, and for the past couple of summers I fished with my cousin. My family, as well as all families in Alakanuk, cut and dries fish during he beginning of the summer, and during the fall for food during the winter months. It has been in our diets forever. We like to cut fish early to prevent flies from laying larvae during the warmer summer months.

I am currently a full time student here at the University of Alaska Fairbanks, meaning I have extra financial responsibilities in comparison to living in my village. Airfare, tuition, books, and housing are expenses that are necessary for college students. The money I made during commercial chum fisheries was poor. Weighing out the difference financially did not come close to paying for my tuition; it didn't even pay for my books. If we sold our kings or had king salmon openings, I would be able to partially pay for my classes and living expenses. This does not just apply to students.

There are limited jobs in all villages. Some fishermen make their earnings last throughout the year until the next season. Our people have made many sacrifices – having to choose between feeding their families or keeping their homes warm. Fishermen have been fishing and have not been able to pay for their gear and gas, just fishing for chums. Fishermen do not take home enough to provide for their families or pay their helper.

I do not agree with the on ban drifting for both subsistence and commercial fishing. All the younger fishermen drift. Additionally, you cannot just set your net any where you want. There are approximately 700 fishermen in districts Y-1, 2 and 3, and realistically people just can not set net where ever they want, as I was told by my uncles and dad. Throughout my subsistence and commercial fishing past, present and future I have always drifted, and I would not have the slightest idea where to set net. Thank you.

Martin B. Moore Sr. P.O. Box 116 Emmonak, Alaska 99581 907-949-1578



Mr. Vince Webster Chairman Alaska State Board of Fisheries and Members of the Board of Fisheries

Testimony before State Board of Fisheries January 25-30, 2010 Fairbanks, Alaska

My name is Martin B. Moore, Sr. I represent 8000 people of the Wade Hampton Census District, people who have direct dependence on the Salmon Fishery resources. 700 permit holders legally licensed to practice in commercial and subsistence. With their 700 crew members, boat captains, deck hands, cannery workers, laborers, office and staff support. Permit holders purchase fishing gear and equipment, 700 out board motors, 700 ply wood and or aluminum boats, 700 King Salmon gear, 700 chum salmon gear- if you are a permit holder, anywhere in this state, you know what other investments are required of a permit holder, since the early fishing industry cost of equipment and gear has been in millions of dollars. The preopening costs for the permit holders are escalating into thousands of dollars including the high cost of gasoline.

The Wade Hampton Fishing District economic base is supported by multi-million and or by billions of dollars worth of investments and expenses. Please **do not pass** the 2010 Fishery Proposals of the following list that we oppose and approve the proposals we support.

# **Recommendations Opposed**

**Recommendations Supported** 

- 1. #83
- 2. #84
- 3. #85
- 4. #86
- 5. #88
- 6. #89
- 7. #90
- 8. #91
- 9. #92
- 10.#93
- 11.#94
- 12.#95
- 13.#96
- 14.#97
- 15.#99

1. #87

2. #98

Many of us are already in dept with the banking institutions and fish processing companies, due in part by fishery economic disasters and low return of fish.

Boards of Fisheries, precautionary steps are warranted not to pass and vote randomly for any proposal without careful rationalization because these

proposals could easily become a man made economic disaster. Careful option is necessary should you reduce net mesh sizes, slice net depts., stop the drifters, reallocate fishery commercial harvest from the Lower Yukon to up river. What about the consequences? Board of Fisheries could close the only economic base Lower Yukon has, close out the self-determination, and close out the ability to earn an income. If the permit holders and or the subsistence users are subject to change Chinook salmon gill net gear to 7 inch mesh. Who will pay for the cost? Because of the many uncertainties of the proposal, we should involve the traditional native knowledge of both down river and up river. So we could share the natural fishery resources proportionately according to our ancesterial tradition. Up river people and down river people cannot fight over this natural resource especially that of native food.

I assure you, if the battle continues between up and down river reference these proposals, it is going to have a very bad ending, our people will suffer as a result-if it's the fish we are fighting about it will eventually disappear according to teaching and tradition.

# Comparison Permit Holders and Populations

Permanent Commercial Fishery rural village communities with less than 2,500 people, most attributable to sustainable village economic base in fishing Districts 1- District 2 District 3-District 5 and District 6

1, 2 & 3 and						
Lower River Set Gillnet Permits P						
84	659					
106	767					
9	232					
91	633					
38	364					
97	757					
69	546					
1	94					
11	328					
65	549					
42	491					
12	204					
10	586					
2	1075					
3	390					
	106 9 91 38 97 69 1 11 65 42 12 10					

Population Districts 4	4, 5 & 6 and	Population Districts	4, 5 & 6 and		
Upper River Set Gills	net Permits	Upper River Fishwhe	Population		
Anvik	4	Fort Yukon	1	581	
Kaltag	3	Galena	21	713	
Galena	5	Grayling	6	192	
Grayling	4.	Huslia	1	285	
Manley Hot Springs	2	Kaltag	13	223	
Nenana	8	Koyukuk	1	101	
Rampart	2	Manley Hot Springs	5	73	
Ruby	1	Nenana	20	519	
Salcha	1	Nulato	11	345	
Stevens Village	1	Rampart	1	21	
Tanana	3	Ruby	7	195	
Total	34	Stevens Village	3	85	
		Tanana	16	278	
		Anvik	10	109	
		Circle City	1	84	
		Dot Lake	1	27	
		Total	118	3,831	

Combine total Districts 4, 5 & 6 Set Gillnet permits, fishwheel permits- 152

Population direct participation in Commercial Fishery - 8000 people- Y1, 2 and 3

State of Alaska
Commercial Fisheries Entry Commission

Permit Renewal Revenue for the Lower Yukon Salmon Gillnet Fishery, 1975 - 2003

January 29, 2007

								4011001	20, 2001									
P. 002/002				•														
72			Resident		Resident	Resident	Resident	Resident	Non-Res.		Non-Res.	Non-Res.	Non-Res.	Non-Res.				
8			Pennits	Resident	Renewal	Permits	Poverby	Ranewal	Pemils	Non-Res.	Renewal	Pennits	Poverty	Renewal	Permits	Permits	Total	Total
0			Renewed	Renewal	Revenue	Renewed	Renewal	Revenue	Renewed	Renewal	Revenue	Renewed	Renewal	Revenue	With Fees	With Fees	Permits	Renewal
LC)	Ishery Description	Year	Full Fee	Fee	Full Fee	Poverty Fee	Fee	Poverty Fee	Full Feb	Fea	Full Fee	Poyerty Fee	Fes	Poverty Fee	Walved	Not Paid	Renewed	Revenue
695																		
1	almon, Gilinnet, Lower Yukon	1975	329	20	\$6,580	469	5	\$2,345	2	20	\$40	0	0	\$0	0	2	800	\$8,965
		1976	525	20	\$10,500	414	5	\$2,070	2	20	\$40	ņ	Ū	\$0	Q.	0	941	\$12, <del>6</del> 10
		1977	368	20	\$7,320	332	5	\$1,660	f	20	\$20	Û	0	<b>90</b>	0	1	699	\$9,000
		1978	465	40	\$18,600	230	15			120	\$360	1	Q	<b>\$</b> 15	0	0	699	\$22,425
		1979	494	40	\$19,760	208	15	\$3,120	4	120	\$480	Û	0	\$0	D	2	706	\$23,360
		1980	601	40	\$24,040	104	15	\$1,560	3	120	\$360	0	0	\$0	0	í	708	\$25,960
2		1981	617	40	\$24,680	87	15	\$1,305	3	120	\$360	0	0	\$0	0	4	707	\$26,345
101		1982	698	15	\$10,470	4	15	\$60	4	45	\$180	0	0	\$0	O	4	706	\$10,710
9077896170		1983	624	30	\$18,720	79	15	\$1,185	5	90	\$450	. 0	Ð	\$0	0	0	708	\$20,355
101		1984	621	30	\$18,630	81	15	\$1,215	5	90	\$450	0	0·	\$0	₽	1	707	\$20,295
		1985	641	30	\$19,230	62	15	\$930	4	90	\$360	. 9	0	\$0	0	1	707	\$20,520
		1986	646	30	\$19,380	53	15	\$795	7	90	\$630	0	0	\$0	2	1	705	\$20,805
		1987	654	30	\$19,620	45	15	\$675	6	90	\$540	0	0	\$0	3	i	705	\$20,835
	•	1988	. 648	50	\$32,400	52	15	\$780	7			0	0		4	0	707	\$34,230
		1989	651	50	\$32,550	48			8			0	0	•	4	0	707	\$34,470
		1990	640	50	\$32,000	58	15	\$870	9	150	\$1,350	0	0	\$0	6	O	707	\$34,220
		1991	618	50	\$30,900	79		\$1,185				0	O-	\$0	5	1	706	\$33,435
		1992	589	50	\$29,450	106						D	Q.	50	4	2	705	\$32,540
		1993	591	50	\$29,550	103				150		0	Q		4	i	706	\$32,895
		1994	616	50	\$30,600	83		\$1,245	8	150		0	45		3	Q	707	\$33,245
		1995	615	50	\$30,750	81	15	\$1,215	9		\$1,350	Û	45	\$0	3	2	705	\$33,315
Commission	·	1996	619	50	\$30,950	75		\$1,125		•	\$1,500	0	45	\$0	3	3	704	\$33,575
EGS GGS		1997	630	50	\$31,500	66	-	\$990	8	150	\$1,200	0	45	\$0	4	1	704	\$33,690
		1998	464	50	\$23,200	232	15	\$3,480	8	150	\$1,200	Ð	45	\$0	í	D.	704	\$27,880
និ		1999	643	50	\$32,150	55	15	\$825	5	150	\$750	0	45	\$0	1	ı	703	\$33,725
2		2000	651	50	\$32,550	44		\$660	6	150		Q	45	\$0	1	3	70i	\$34,110
☱		2001	71	50	\$3,550	6	15	\$30	ŋ	150	<b>\$0</b>	Ũ	45	\$0	623	2	77	\$3,640
OM-Entry		2002	654	60	\$39,240	31	30	\$930	7	180	\$1,260	0	90	\$0	1	10	692	\$41,430
0		2003	658	60	\$39,360	28	30	\$840	7	180	\$1,260	0	90	\$0	1	12	691 <sub></sub>	\$41,460
i																		

Total Permit Renewal Revenue 1975 - 2003 .

\$769,045

Fish permit holders 1975-2003, 700

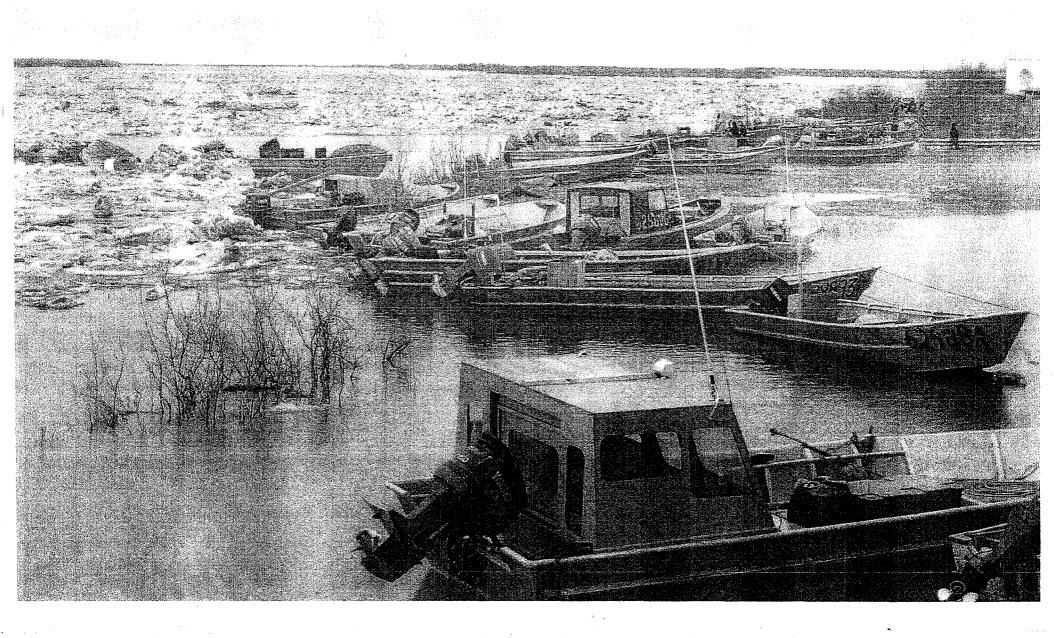
of 5

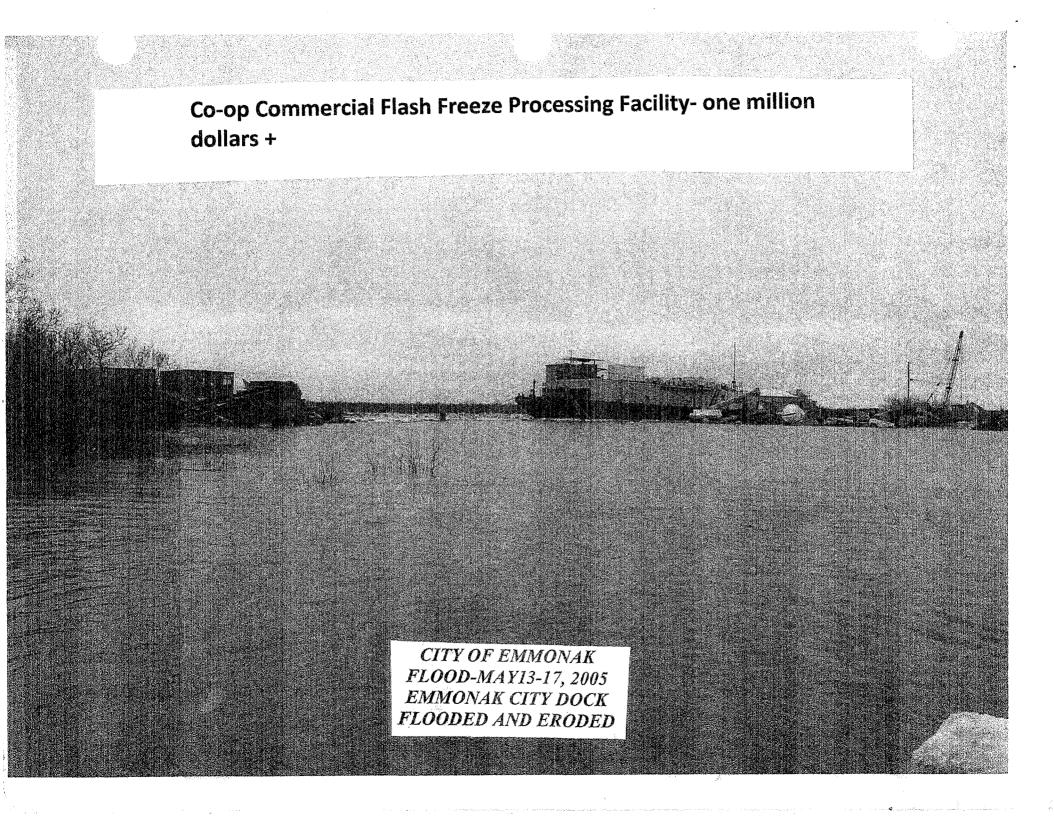
estimated Fees paid in 2003

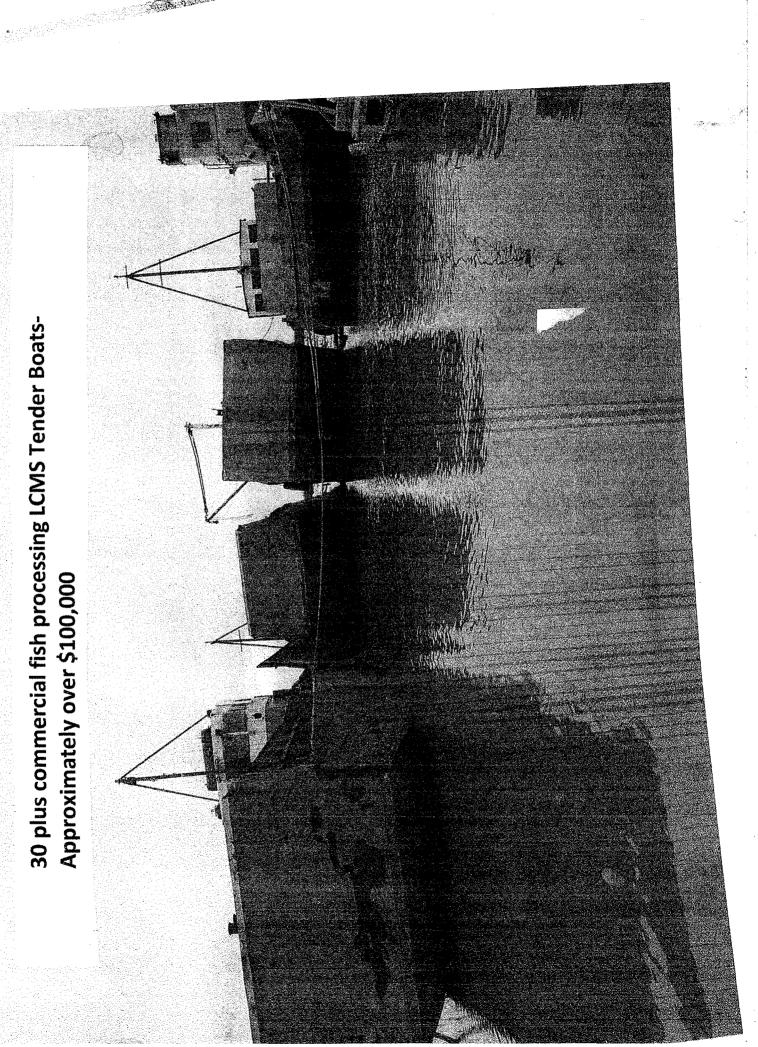
Res. Leut Fees = \$41820.00 697 X \$60.00 non- Res. du + les = \$ 1080.00 1/9/2004 2:21 PM 6 x \$180.00

Federal God-Stimules PAORAGE

Wade Hampton District partial listing of 700 permit holder's boat and motors. Approximate cost \$18,000







#### Exhibit A

Table 5. Alaskan catch of Yukon River Chinook salmon, 1961-2000

	Estimated		Harvest		
	Subsistence			and the second s	
Year	Use(a)	Subsistence(b)	Commercial(C)	Sport(d)	Total
1961	21,488	21,488	119,664		141,152
1962	11,110	11,110	94,734		105,844
1963	24,862	24,862	117,048		141,910
1964	16,231	16,231	93,587		109,818
1965	16,608	16,608	118,098		134,706
1966	11,572	11,572	93,315		104,887
1967	16,448	16,448	129,656		146,104
1968	12,106	12,106	106,526		118,632
1969	14,000	14,000	91,027		105,027
1970	13,874	13,874	79,145		93,019
1971	25,684	25,684	110,507		136,191
1972	20,258	20,258	92,840		113,098
1973	24,317	24,317	75,353	•	99,670
1974	19,964	19,964	98,089		118,053
1975	13,045	13,045	63,838		76,883
1976	17,806	17,806	87,776		105,582
977	17,581	17,581	96,757	156	114,494
978	30,297	30,297	99,168	523	129,988
979	31,005	31,005	127,673	554	159,232
980	42,724	42,724	153,985	956	197,665
1981	29,690	29,690	158,018	769	188,477
982	28,158	28,158	123,644	1,006	152,808
1983	49,478	49,478	147,910	1,048	198,436
1984	42,428	42,428	119,904	351	162,683
1985	39,771	39,771	146,188	1,368	187,327
1986	45,238	45,238	99,970	796	146,004
1987	53,124	53,124	134,760	502	188,386
1988	46,032	46,032	101,445	944	148,421
1989	51,062	51,062	105,491	1,053	157,606
1990	51,594	51,181	97,708	544	149,433
1991	48,311	46,773	107,105	773	154,651
992	46,553	45,626	122,134	431	168,191
1993	66,261	65,701	95,682	1,695	163,078
994	55,266	54,563	115,471	2,281	172,315
1995	50,258	48,934	126,204	2,525	177,663
996	43,827	43,521	91,890	3,151	138,562
997	57,060	56,291	116,421	1,913	174,625
1998	54,171	54,090	44,625	654	99,369
999	52,699	52,525	69,592	h.	122,087
2000 g	h	ریدر بیرو h	9,115	h	9,115
Average					~ 3 E & W
961-89	27,102	27,102	109,866	771	137,314
1990-99		51,921	98,680	1,552	151,997
	51,603	51,072	89,740	2,061	142,461

a Includes salmon harvested for subsistence purposes, and an estimate of the number of salmon carcasses harvested for the commercial production of salmon roe and used for subsistence. These data are only available since 1990.

b Includes salmon harvested for subsistence and personal use.

c Includes ADF&G test fish sales, fish sold in the round, and estimated numbers of female salmon commercially harvested for the production of salmon roe (see Bergstrom et al. 1992:1990 Yukon Area AMR).

d Sport fish harvest for the Alaskan portion of the Yukon River drainage (see Shultz et al. 1993: 1992 Yukon Area AMR).

f Includes 653 and 2,136 chinook salmon illegally sold in District 5 and 6 (Tanana River), respectively.

g Data are preliminary.

h Data are unavailable at this time.

RC 72

#### **Public Testimony**

#### Morris Nassuk, Native Village of Koyuk

The Native Village of Koyuk supports Proposals 68 & 69 which expand hook and line as a customary and traditional means of subsistence harvest. Both of these proposals would eliminate the requirement for subsistence users to obtain a sport fishing license. Obtaining a sport fishing license is a hardship for subsistence users in our region. Proposal 69 would allow subsistence users in Koyuk, Shaktoolik, Stebbins, St. Michael, and could be expanded to include St. Lawrence Island. Currently hook and line is legal subsistence gear in the portion of Norton Sound west of Bald Point.

Hook and line has been a traditional means of harvesting fish for subsistence even before statehood. We have used hook and line gear to catch trout, grayling, tomcod, smelt, pike and salmon. We do not fish recreationally. Every time we fish, we are fishing for food for our families and village. We share with elders and those unable to fish for themselves, and we pass along traditions and culture to our youth. It is important that we are able to use hook and line gear now and in the future.

Thank you for considering my testimony.

## Public Testimony Louis Green Jr. – Nome

Mr. Chair, the Board,

My name is Louie Green and I am here to speak on behalf of Sitnasuak Native Corporation and Nome Eskimo Community membership. Kawerak funded my travel here today.

Thank you for this opportunity to speak in favor of Proposals 68, 69, 70 and 71 as they would give more opportunity to our subsistence users and that these are methods that Native people have practiced for generations.

I've heard a lot of testimony from Yukon River people about their inability to practice cultural and traditional harvest of salmon because of closure in their big river. This is such a big river. How can this be? I have been told that salmon runs are in danger in the Nome Subdistrict because our rivers are small by comparison.

I hear the haunting echoes of our elders of long past. They were saying the same thing as these people today. The fact that these comments are coming from Yukon people and are similar to what we were saying 20 years ago is alarming to me but not surprising. I made the statement back then that what is happening here in Norton Sound is potentially what is going to happen elsewhere if conservation measures are not taken by the Board and ADF&G.

Throughout the late 90's through 2001, a conservation-driven Board took a lot of time to shape commercial fisheries to protect our subsistence fisheries, but by 2004 all their hard work went out the window under a new administration. This was very disappointing to hear.

I have said this before. "Politics" play a big part in how we subsist off our good land. This should not be. We are not able to practice our cultural and traditional way of life because we are forced to do without our salmon.

We the people of the Northern Norton Sound ask the Board to make subsistence a priority, as it was promised under ANILCA, when making decisions about fisheries outside our area that potentially affect our fisheries. We would request ADF&G to please step up to the plate and do something toward increasing our salmon runs. The end of the Iditarod may be in Nome, but please don't let it be the end of our salmon runs too.



Martin Kelly, I am here representing Pilot Station Traditional Council. We have 822 currently enrolled to PSTC. I have been active with the weekly in-season Subsistence Teleconferences hosted by YRDFA for the last 4 or 5 summers. Some years ago I also participated with the Yukon Salmon Exchange Program also sponsored by YRDFA. I also have been taking Yukon River samples for the last 5 years under the Water Quality Monitoring Program, Science Department of the Yukon River Inter-Tribal Watershed Council. I am a subsistence fishermen.

I am testifying on behalf of my Tribe regarding our subsistence and commercial salmon fisheries in the Y-2 district. Our Fisheries for the last few summers are highlighted by Closures & Restrictions; my traditional customary practice through subsistence fishing provides a needed and healthy supplement for my family and Tribe many years then I know; our fishing is continues to be the core of survival today.

On behalf of the subsistence & commercial fishermen of Pilot Station; we emphasize strongly opposing **proposal 95** – **involving reallocation of the current harvest percentages.** If passed; this proposal would cut my districts current allocation by 50%. Our villages on the lower Yukon are seemingly deprived from the current restrictions & windows, especially for the subsistence fisher.

The cost of living; including the recession & the poor return of last season's King salmon had a devastating impact to all our families who heavily rely on the return of the Yukon King.

Administrative Order No. 186 was passed on the 29<sup>th</sup> day of September, 2000 by Governor Tony Knowles. This order

empowers Federally Recognized Tribes to work Government to Government with the State of Alaska.

"The State of Alaska recognizes and values the revenue and services that Alaska's Tribe's contribute to the state's economic and social well-being by virtue of their direct Tribal Authority and responsibility for the delivery of social, economic, cultural and other programs and services."

My Tribe provides for all our Social Services & need; we are aware of the families in my village needing help. We strongly consider hunting & fishing as part of our responsibility to provide social services.

My point is if Fish & Game is representing the State and is willing to cut and restrict our subsistence harvest, what other services would the State provide as an alternative supplement. Fish & Game in Pilot Station has been @ its site for well over 30 years, but yet has no Office site in Pilot Station, maybe if there was an Office, someone would be willing to testify on behalf of the State as to how we live. Your decisions made during this session will impact our survival, I would strongly suggest this board oppose proposal 95.

# Norton Sound and Kotzebue Region Advisory Committee votes

# Kotzebue area ACs on Proposal 68:

<b>Kotzebue Advisory Committee</b>	Support
<b>Upper Kobuk Advisory Committee</b>	Support
Noatak/Kivalina Advisory Committee	Support

Northern Seward Peninsula Advisory Committee Support, amended with sport fish bag limits. (Discussions with the other ACs included the idea that sport fish limits would apply.)

Lower Kobuk Advisory Committee met and discussed the proposal but didn't want to vote before hearing from Upper Kobuk and Noatak/Kivalina ACs, as those areas are more affected by sport fishing.

**Norton Sound Region:** The two Norton Sound committees mostly voted on proposals for their own area, northern or southern. They have opposing votes on proposals 77 and 78.

Proposal 54	Southern Norton Sound	Northern Norton Sound 54 Fail 1,8			
55	Pass, unanimous	55	no action		
69	Pass, unanimous	69			
70		70	Pass, unanimous		
71		71	Pass, 7/2		
72	Pass, unanimous	72			
73		73	Pass, 6/2/1		
74		74	Pass, unanimous		
75		75	no action		
76	Fail, unanimous	76			
77	Fail, unanimous	77	Pass, 7/0/1		
78	Fail, unanimous	78	Pass, unanimous		
79	no action	79	Pass as amended*		
80		80	Fail		

<sup>\*79</sup> amended to allow only open pounding, in Port Clarence only

# **RC 76**

# Alaska Board of Fisheries Committee Report

# **COMMITTEE A**

# **AYK Resident Species**

January 28, 2010

#### **Board Committee Members:**

- 1. Karl Johnstone, \*Chair
- 2. Bill Brown
- 3. John Jensen

## Alaska Department of Fish and Game Staff Members:

- 1. Charlie Swanton, Director, SF
- 2. Rob Bentz, Deputy Director, SF
- 3. Don Roach, Regional Supervisor, SF
- 4. Tom Taube, Regional Management Biologist, SF
- 5. Audra Brase, Lower Tanana Area Management Biologist, SF
- 6. Fronty Parker, Upper Tanana Area Management Biologist, SF
- 7. Brendan Scanlon, Northwest/North Slope Area Management Biologist, SF
- 8. Klaus Wuttig, Fishery Biologist, SF
- 9. John Chythlook, Kuskokwim Area Management Biologist, SF
- 10. Phil Joy, Fishery Biologist, SF
- 11. Andy Gryska, Fishery Biologist, SF
- 12. Tim Viavant, Regional Management Biologist, SF
- 13. Erik Anderson, Education Specialist, SF
- 14. Mike Booz, Fishery Biologist, SF
- 15. Jeff Estensen, Kuskokwim Area Management Biologist, CF
- 16. Jim Simon, Regional Supervisor, SD
- 17. Jim Magdanz, Subsistence Resource Specialist, SD
- 18. April Behr, Fishery Biologist, SF
- 19. Lisa Stuby, Fishery Biologist, SF

#### Advisory Committee Members:

- 1. Jeremy Charlie-Minto/Nenana AC
- 2. Mike Kramer-Fairbanks AC

#### Public Panel Members:

1. Ethan Birkholz-Self

- 2. Rueben Hanke-KRSA
- 3. Art Nelson-Self
- 4. Mike Sloan-Kawerak, Inc.
- 5. Louie Green-Sitnasuak Native Corporation/ Nome Eskimo Community
- 6. Russell Wood-Self

Federal Subsistence Representative: None.

The Committee met January 28, 2010 at 8:15 a.m. and adjourned at 10:20 a.m.

PROPOSALS BEFORE THE COMMITTEE WERE: (17 total) #49 through #65.

PROPOSAL 49 – 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means for the Tanana River Area. Update the Tanana River Management Area stocked waters.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: None.

#### **Narrative of Support and Opposition:**

Department: Housekeeping proposal; adoption of this proposal will cite correct regulations to newly stocked waters and waters no longer stocked.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Deletes lakes that are not productive lakes or where there is no longer public access.
- Newly added lakes are sometimes suggested by the public.
- Will not negatively affect any users.

#### **Opposition:**

• None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support as amended.

Board Committee Recommendation: Consensus to support substitute language.

Substitute Language: (c)(29) in stocked waters, the bag, possession, and size limit for rainbow trout, Arctic char/Dolly Varden, landlocked salmon, and Arctic grayling is 10 of all stocked species combined, of which no more than one fish may be 18 inches or greater in length; for the purposes of this paragraph "stocked waters" include Backdown Lake, Ballaine Lake, Bathing Beauty Pond, Bear Lake, [BIG BEAR LAKE, Big "D" Pond, Big Lake, Birch Lake, Bluff Cabin Lake, Bolio Lake, Brodie Lake, Bullwinkle Lake, Chena Lake, Chet Lake, CHSR 25.0 Mile Pit, CHSR 30.0 Mile Pit, CHSR 42.8 Mile Pit (Red Squirrel Pit). CHSR 45.5 Mile Pit. CHSR 47.9 Mile Pit. Coal Mine Road #5. Craig Lake. Crystal Lake. Dick's Pond, Doc Lake, Donna Lake, [FIREBREAK LAKE], Forest Lake, Four Mile Lake, Fourteen Mile Lake, Geskakmina Lake, Ghost Lake, Grayling Lake, Hidden Lake (Eielsen Air Force Base), Hidden Lake (Tetlin NWR.), Horseshoe Lake, "J" Lake, Jan Lake, Johnson R. #1 Pit, Kenna Lake, Ken's Pond, Kids Fishing Pond, Kimberly Lake, Last Lake, [LES' LAKE], Lisa Lake, [LITTLE BEAR LAKE], Little Donna Lake, Little Lost Lake, Long Pond, Lost Lake, Luke Lake, Lundgren Pond, Manchu Lake, Mark Lake, Meadows Rd. # 1, Meadows Rd. # 2, Meadows Rd. # 3, Meadows Rd. # 4, Meadows Rd. # 5, Meadows Rd. # 6, Monterey Lake, Moose Lake, [MOSOUITO CREEK LAKE], Mullins Pit, Nenana City Pond, Nickel Lake, No Mercy Lake, Nordale # 2, North Chena Pond, North Pole Pond, North Twin Lake, Olnes Pond, Otto Lake, Parks 261 Pond, Parks 285 (White Alice Pit), Parks 286.3, Paul's Pond, Piledriver Slough, Polaris Lake, Quartz Lake, Rangeview Lake, Rapids Lake, Richardson Hwy. 28 M. Pit, Richardson Hwy. 31 M. Pit, Richardson Hwy. 81 Mile Pit, Robertson Lake #2, Rockhound Lake, Round Pond, [SANSING LAKE], Shaw Pond, Sheefish Lake, Silver Lake (aka Mosquito Creek Lake), Sirlin Drive Pond, South Johnson Lake, South Twin Lake, [SQUARE LAKE], Steese Hwy. 29.5 Mile Pit, Steese Hwy. 31.6 Mile Pit, Steese Hwy. 33.5 Mile Pit, Steese Hwy. 34.6 Mile Pit, Steese Hwy. 35.8 Mile Pit, Steese Hwy. 36.6 Mile Pit, [STEESE HWY. 120.0 MILE PIT], Stringer Rd. Pond, Triangle Lake, Tschute Lake, Wainwright #6, Weasel Lake, West Iksgiza Lake, West Pond, Z Pit (Chena Floodway);

PROPOSAL 50 – 5 AAC 69.155. North Slope Area Wild Arctic Grayling Management Plan, 5 AAC 70.055 Northwestern Area Wild Arctic Grayling Management Plan, 5 AAC 71.055 Kuskokwim-Goodnews Area Wild Arctic Grayling Management Plan, 5 AAC 73.055 Yukon River Area Wild Arctic Grayling Management Plan, and 5 AAC 74.055 Tanana River Area Wild Arctic Grayling Management Plan. Align the Wild Arctic Grayling Management Plans with area regulations.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: None.

## Narrative of Support and Opposition:

## Department:

• Housekeeping proposal; adoption of this proposal will correct the catch and release-spawning season end date to May 31 from May 30 which was inadvertently included in the plans when they were adopted, identify water bodies managed under the conservative management approach (Arolik and Tok rivers), and correct the name of Five-Mile Clearwater Creek.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

• Will not negatively affect any current users for these drainages.

#### **Opposition:**

· None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

PROPOSAL 51 - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Area. Align several rivers in the Tanana River Management Area with the Wild Arctic Grayling Management Plan.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: None.

#### **Narrative of Support and Opposition:**

#### Department:

- Simplifies Arctic grayling regulations in the Tanana River Drainage.
- Aligns area regulations with the Wild Arctic Grayling Management Plan.
- Sport fishing opportunity will be increased.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- There are no conservation concerns in areas where spawning restrictions are being removed due to high abundance of Arctic grayling.
- Chatanika River bait regulation will be consistent with regulations in other drainages which allow the use of bait for burbot fishing.
- No conservation concern for burbot.

#### Opposition:

• Given the proximity to Fairbanks there may be concerns with removing the spawning closures.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

PROPOSAL 52 - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Area. Clarify regulations for Chena Slough (aka Badger Slough).

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3.

Timely Public Comment: None.

Record Comments: None.

# Narrative of Support and Opposition:

#### Department:

• Reduces confusion regarding which water anglers are fishing on and simplifies current regulations.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- Proposal does not change the regulation; it clarifies existing regulations.
- Slough is occasionally cut off from the Chena River during low water, which creates confusion to the public that the slough is a part of the river.
- Transient population of anglers often does not understand that the slough is a tributary of the Chena River.
- Would benefit enforcement staff.

Opposition: None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

<u>PROPOSAL 53</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Area. Clarify the single hook regulations in the Tanana River drainage.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: None.

#### Narrative of Support and Opposition:

#### Department:

- Reduces angler confusion and simplifies current regulations.
- Makes single hook regulations consistent throughout the Tanana River.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- Already in fishing regulations summary, but this change will update regulations.
- Will still allow anglers to use greater than 3/4" treble hooks for salmon and northern pike in the Chena River.

Opposition: None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

<u>PROPOSAL 54</u> - 5 AAC 70.011. Seasons and bag, possession, and size limits for the Northwestern Area. Open the Nome River to catch-and-release fishing for Arctic grayling.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: None.

Record Comments: None.

# Narrative of Support and Opposition:

#### Department:

• Requests that this proposal be withdrawn.

• The stock assessment conducted in 2009 determined that the abundance of Arctic graying  $\geq 15$  inches within the study area was below the management objective of 2,000 fish.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

Opposition: None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support withdrawn.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to withdraw.

Board Committee Recommendation: Take no action.

<u>PROPOSAL 55</u> - 5 AAC 69.105. Description of the North Slope Area, 70.005. Description of the Northwestern Area, and 73.005. Description of the Yukon River Area. Aligns sport fish management area boundaries with commercial/subsistence management area boundaries.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9, 12.

Timely Public Comment: PC 8, 9.

Record Comments: None.

#### Narrative of Support and Opposition:

#### Department:

• Housekeeping proposal; simplifies regulatory boundaries by aligning sport fish regulatory boundaries with commercial and subsistence regulatory boundaries.

Department of Law: None.

Federal Subsistence Representative: Support. Would reduce the potential for confusion for all users.

#### Support:

- Aligns management area boundaries for sport, subsistence and commercial fisheries areas.
- Future joint management actions taken by sport and commercial fisheries divisions would apply to the same areas.

**Opposition:** None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

<u>PROPOSAL 56</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Area. Move sport fish regulatory boundary in the Chatanika River.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3.

Timely Public Comment: None.

Record Comments: RC 2, 3.

#### Narrative of Support and Opposition:

#### Department:

• Elliott Highway Bridge provides a more permanent and recognizable boundary marker.

• Would eliminate any ambiguity with respect to enforcement.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- The new location of this boundary would eliminate angler confusion.
- Boundary change will only affect the king salmon fishery.
- Elliott Highway Bridge provides a more permanent and recognizable boundary marker.
- Would eliminate any ambiguity with respect to enforcement.
- Would be consistent with department's approach with using bridges as regulatory boundaries in other areas of the state.
- Plenty of river access points downstream of the bridge at an old state recreation site.

# **Opposition:**

- The change in the boundary would reduce sport fishing opportunity by one mile, and is not needed for any conservation reason.
- The river has limited road access and this area is easily accessed from the bridge.
- People enjoy canoeing down from the Steese Highway Bridge to the Elliot Highway Bridge and this change in regulation will remove their ability to fish for king salmon in this one mile stretch of river.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: Fairbanks.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

<u>PROPOSAL 57</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Area. Amend whitefish sport bag limits in the Chatanika River.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

#### Narrative of Support and Opposition:

#### Department:

• Simplifies the regulations.

- Increases sport fish harvest opportunity for whitefish in the Chatanika River.
- Will not affect the personal use spear fishery.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- There are no conservation concerns for these stocks.
- Proposal is unlikely to result in a significant increase in harvest due to the difficulty in catching whitefish by rod and reel.

**Opposition:** None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: Fairbanks.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

<u>PROPOSAL 58</u> - 5 AAC 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Amend bait restrictions in Fielding Lake.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

#### Narrative of Support and Opposition:

#### Department:

• There is a low abundance of lake trout in Fielding Lake.

- A high proportion of the catch is released because of the length limit.
- The use of bait and associated hooking morality would result in exceeding sustainable levels of harvest.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- The current bait restriction makes it extremely difficult to catch lake trout and burbot in the winter.
- Recently, effort has only increased slightly, but harvest has not.
- Requiring the use of circle hooks may be an option to allow bait and still reduce hooking mortality.

#### **Opposition:**

- The stock is depressed and cannot sustain any additional fishing mortality.
- The definition of closely attended would still allow for lines that are fished on the bottom, so there would still be substantial hooking mortality because of the use of bait and length limit.
- There are a number of other winter lake trout fishing opportunities in the area that allow bait.
- Higher hooking mortality when fish are removed from water when temperatures are -40°F.

# POSITIONS AND RECOMMENDATIONS

ADF&G Position: Opposed.

AC Positions: Support: none.

Oppose: Fairbanks.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

<u>PROPOSAL 59</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Allow for only one closely attended line in Fielding Lake.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

#### Narrative of Support and Opposition:

#### Department:

• This would unnecessarily complicate the regulations.

• The current regulations provide sport fishing opportunity while allowing the lake trout population to recover.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

 This proposal would result in more anglers jigging, which should result in less hooking mortality.

#### **Opposition:**

• This proposal is not necessary without the adoption of proposal 58.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: Fairbanks.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

<u>PROPOSAL 60</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Allow a single hook with trailer hook in Harding Lake.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

# Narrative of Support and Opposition:

#### Department:

• This proposal would increase harvest and hooking mortality due to increased gear effectiveness.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

None.

#### **Opposition:**

• This proposal would lead to increased hooking mortality, and there are conservation concerns for lake trout in Harding Lake.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: Fairbanks.

Public Panel Recommendation: Consensus to oppose.

Board Committee Recommendation: Consensus to oppose.

<u>PROPOSAL 61</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means for the Tanana River Area. Increases the northern pike bag limit in Volkmar Lake.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

#### Narrative of Support and Opposition:

#### Department:

- The northern pike population in Volkmar Lake has surpassed the management objective, which would allow for more harvest.
- Provides additional harvest opportunity.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- Based on recent stock assessment studies, there are no conservation concerns with this stock, and this action will provide additional sport fish harvest opportunity.
- Amending proposal to two pike per day with only one fish  $\geq 30$ " would be a more conservative approach.
- The department is not opposed to the amendment proposed by the Fairbanks Advisory Committee.

Opposition: None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: Fairbanks as amended.

Oppose: None.

Public Panel Recommendation: Consensus to support substitute language.

Board Committee Recommendation: Consensus to support with substitute language.

Substitute Language: (c)(28) in Volkmar Lake, northern pike may be taken only from June 1 through March 31, with a bag and possession limit of [ONE FISH, WITH NO SIZE LIMIT] two fish, of which only one fish may be 30 inches or greater in length;

<u>PROPOSAL 62</u> - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Increase the open season for northern pike in Volkmar Lake by 20 days.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: None.

Record Comments: RC 2, 3.

## Narrative of Support and Opposition:

#### Department:

- The northern pike population in Volkmar Lake has surpassed the management objective, which would allow for more harvest.
- Provides additional harvest opportunity.
- Simplifies area regulations.
- Recommends that the fishing season for northern pike in George Lake also be changed so that the spawning closure regulation would be consistent for all lakes in this management area.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- There are no conservation concerns for northern pike populations in either Volkmar or George lakes.
- Northern pike spawning closure will still be in effect; consistent with area regulations.

Opposition: None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: Fairbanks.

Oppose: None.

Public Panel Recommendation: Consensus to support with substitute language.

Board Committee Recommendation: Consensus to support substitute language.

Substitute Language: 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means for the Tanana River Area.

(c)[(11) IN GEORGE LAKE, INCLUDING THE GEORGE LAKE OUTLET STREAM, NORTHERN PIKE MAY BE TAKEN ONLY FROM JUNE 1 THROUGH MARCH 31;]

Committee A Report

(28) in Volkmar Lake, [NORTHERN PIKE MAY BE TAKEN ONLY FROM JUNE 1 THROUGH MARCH 31, WITH A] <u>the</u> bag and possession limit [OF ONE FISH, WITH NO SIZE LIMIT] <u>for</u> northern pike is one fish;

<u>PROPOSAL 63</u> - 5 AAC 74.044. Minto Flats Northern Pike Management Plan. Aligns areas in the the Minto Flats Northern Pike Management Plans (5 AAC 74.044).

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 3, 6.

Timely Public Comment: PC 4.

Record Comments: RC 2, 3.

### Narrative of Support and Opposition:

### Department:

• This is a housekeeping proposal which will align the area description in the sport fish and subsistence management plans.

Department of Law: None.

Federal Subsistence Representative: None.

### Support:

• This change will not have any effect on subsistence regulations and will not affect subsistence use.

Opposition: None.

### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: Fairbanks.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

<u>PROPOSAL 64</u> - 5 AAC 01.244 (2)(b). Minto Flats Northern Pike Management Plan. Establish subsistence daily household limit for winter pike fishery.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 2, 3, 7.

Timely Public Comment: PC 4, 12.

Record Comments: RC 2, 3.

### Narrative of Support and Opposition:

Department: This proposal will spread subsistence harvest over a longer time period, allowing more subsistence users the opportunity to participate in the fishery.

Department of Law: None.

Federal Subsistence Representative: None.

### Support:

- This proposal may provide subsistence harvest opportunity of northern pike available to more users.
- This proposal will continue to provide reasonable subsistence opportunity.
- The Fairbanks AC amended its proposal to a daily bag limit of 10, and 20 in possession based on recommendation from the Minto/Nenana AC.
- There are other traditional subsistence fishing areas nearby that will not fall under this regulation as it is specifics to the lower Chatanika River area only.
- 75% of subsistence users harvest less than 25 northern pike per year.

**Opposition:** None.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral.

AC Positions: Support: Fairbanks, Minto/Nenana as amended.

Oppose: None.

Public Panel Recommendation: Consensus to support as amended.

Board Committee Recommendation: Consensus to support substitute language.

Substitute Language: 5 AAC 01.244. Minto Flats Northern Pike Management Plan.

(2)(B) there is no daily or annual bag limit; except within the area described in (b)(2)(G) of this section, a daily limit of 10 fish, with a possession limit of 20 fish;

PROPOSAL 65 - 5 AAC 01.244. Minto Flats Northern Pike Management Plan. 70.044(d). Minto Flats Northern Pike Management Plan. Require single hooks for summer sport and winter subsistence pike fishery.

Staff Reports: RC 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: AC 2, 3.

Timely Public Comment: PC 4.

Record Comments: None.

### Narrative of Support and Opposition:

### Department:

- Current regulatory management plan is sufficient to provide sustain yield.
- No conservation concern with Minto northern pike stock.

Department of Law: None.

Federal Subsistence Representative: None.

### **Support:**

- Lots of catch and release fishing in the summer.
- Harvesters are looking for particular size fish and releasing others.
- Single hooks are easier to remove than treble hooks from northern pike.
- Population has declined over the last few years.
- Winter subsistence fishery regulation is already single hook. This would align summer sport fishery and winter subsistence fishery regulations.
- Some northern pike in the Minto Flats area have noticeable jaw damage from hooking.

### **Opposition:**

- Will not limit harvest.
- Will cost money to replace gear.
- Hooking location on fish is a more important factor in mortality than hook type.
- More of an education issue with proper catch and release techniques.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose.

AC Positions: Support: Fairbanks, Minto/Nenana.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

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**RC 77** 

# Alaska Board of Fisheries Committee Report

# **COMMITTEE B**

Kuskokwim, Kotzebue and Norton Sound-Port Clarence Areas Salmon and Herring January 28, 2010

#### **Board Committee Members:**

- 1. John Jensen, \*Chair
- 2. Bill Brown
- 3. Karl Johnstone

### Alaska Department of Fish and Game Staff Members:

- 1. Jim Menard, Area Management Biologist, Arctic Area, CF
- 2. Scott Kent, Assistant Area Management Biologist, Arctic Area, CF
- 3. Jeff Estensen, Area Management Biologist, Kuskokwim Area, CF
- 4. John Chythlook, Area Management Biologist, Kuskokwim Area, SF
- 5. Doug Molyneaux, Area Research Biologist, Kuskokwim Area, CF
- 6. Dan Bergstrom, Regional Management Biologist, AYK, CF
- 7. John Linderman, Regional Supervisor, AYK, CF
- 8. Don Roach, Regional Supervisor, Region 3, SF
- 9. Tom Taube, Regional Management Biologist, Region 3, SF
- 10. Brendan Scanlon, Area Management Biologist, Northwest Area, SF
- 11. Lisa Stuby, Research Biologist, SF
- 12. Jim Magdanz, Subsistence Resource Specialist, SD
- 13. James Simon, Regional Supervisor, AYK, SD
- 14. Travis Elison, Assistant Area Management Biologist, Kuskokwim Area, CF
- 15. Eric Volk, Chief Fisheries Scientist, Salmon, CF
- 16. Al Cain, Department Enforcement Specialist
- 17. Rob Bentz, Deputy Director, SF
- 18. Lance Nelson, DOL

#### Advisory Committee Members:

- 1. Paul Johnson, Southern Norton Sound AC (SNSAC)
- 2. Jack Fagerstrom, Northern Norton Sound AC (NNSAC)

### Public Panel Members:

- 1. Greg Roczicka, Kuskokwim River Salmon Management Working Group (KRSMWG)
- 2. Michael Sloan, Kawerak, Inc.

- 3. Louie Green Jr., Sitnasuak Native Corp. / Nome Eskimo Community
- 4. Charlie Lean, Norton Sound Economic Development Corporation (NSEDC)

Committee B Report

- 5. Jennifer Hooper, Association of Village Council Presidents (AVCP)
- 6. Wes Jones, NSEDC
- 7. Paul Johnson, Southern Norton Sound AC
- 8. Morris Nassuk, Native Village of Koyuk
- 9. Reuben Hanke, Kenai River Sportfishing Association (KRSA)
- 10. Charles Saccheus Sr., Elim
- 11. Reggie Barr, Brevig Mission
- 12. Kevin Keith, NSEDC
- 13. Pat Martin, Area M fisherman

### Federal Subsistence Representative:

- 1. Richard Cannon, USFWS OSM
- 2. Rod Campbell, USFWS OSM

The Committee met January 28, 2010 at 1:15 p.m. and adjourned at 4:10 p.m.

PROPOSALS BEFORE THE COMMITTEE WERE: 66-80 (15 total).

PROPOSAL 66 – 5 AAC 07.365. Kuskokwim River Salmon Rebuilding Management Plan. Allow retention of chum salmon in Aniak River sport fishery.

Staff Reports: RC 3, Written Tab 5.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: RC 1, Public Comment Tab, PC 3, 8, 9, 14, 21.

Record Comments: RC 18.

### Narrative of Support and Opposition:

### Department:

- Housekeeping proposal allowing retention of chum salmon from Aniak River. Department supports aligning sport fish regulations for chum salmon retention from Aniak River with the Kuskokwim River Salmon Rebuilding Management Plan.
- 100 or fewer chum salmon were harvested annually in the sport fishery from Aniak River when it was open prior to 2000.
- There is no conservation concern for the chum salmon stock in the Aniak River drainage.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

Opposition: None.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus for support.

Board Committee Recommendation: Consensus to Support

**PROPOSAL** 67 - 5 **AAC** 07.331(c). Gillnet specifications and operations. Change maximum mesh size from 8 inch to 6 inch in Kuskokwim River.

Staff Reports: RC 4, Written Tab 9.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3.

Timely Public Comment: RC 1, Public Comment Tab, PC 3, 4, 8, 9, 14, 21.

Record Comments: RC 18, 81, 82.

### Narrative of Support and Opposition:

#### Department:

• This regulation has not been used since placed into regulation in 2007.

• Use of 6-inch mesh does not reduce the number of Chinook salmon harvested. Six-inch mesh targets smaller male fish versus 8-inch mesh that targets larger fish that have a higher percentage of females.

Department of Law: None.

#### Federal Subsistence Representative:

• Supports proposal: it helps protect the quality of Chinook salmon escapement and benefits subsistence users.

### Support:

- There was opposition when 6-inch mesh size was proposed in 1987.
- Do not see using 8-inch mesh as a viable management tool.
- Creates false expectations by commercial fishermen as the regulation will not be used.
- There are negative impacts to larger female Chinook salmon using 8-inch gear.
- Kuskokwim Area residents want to keep the healthy Chinook salmon run they have now.
- Harvestable surpluses now are adequate for subsistence harvests and escapement.
- Limited inseason indicators to identify a large run of Chinook salmon.
- Would not want to see 8-inch gear used in June.
- The department does not see using it as the regulation was intended.
- AVCP reported one member community supported the proposal.
- In regulation, during June and July, the commercial salmon fishery is directed to target chum salmon. By late June when the first fishery occurs, Chinook, sockeye, and chum salmon are abundant and all fish are desired in the harvest. Six-inch or less mesh size optimizes catches of all 3 species.
- Proponent offered alternative of not allowing use of 8-inch mesh until after June 30.

### **Opposition:**

- Mesh sizes larger than 6-inch could be used to avoid sockeye and chum salmon harvests during poor escapement years while allowing a commercial harvest of Chinook salmon during a strong run.
- The department has done a good job of managing the fisheries since 2000.
- AVCP reported three member communities opposed the proposal.
- Provides another tool in the toolbox to catch Chinook salmon.
- Would likely not be used in June because of limited inseason indicators.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus

#### NORTON SOUND STOCKS OF CONCERN

Staff Reports: RC 4, Oral Tab 2, Written Reports 3, 4, 5.

Sub-district 1 chum salmon

Sub-districts 2 and 3 chum salmon Sub-districts 5 and 6 Chinook salmon

### Department Comments:

- Department staff recommended continuing all three stocks of concern as a yield concern.
- In 1999, Niukluk River escapement was 35,000 chum salmon, which resulted in a poor run in 2003; the 20,000 that escaped in 2003 produced the 50,000 escapement observed in 2007, the best in 10 years.
- A risk analysis method (Bernard et al. 2009) was used to revise the Niukluk River escapement goal. The method is applied to stocks that are caught incidentally or are caught at low levels. The risk of an unwarranted management concern is balanced against a drop in mean escapement.
- The board asked if data stopped at 1997, 'What would the estimated SEG be?' Staff responded that an SEG based on a sufficient time series of higher escapements would be higher. It is not possible to do stock-recruit analysis because all we have is escapement information.
- Escapement goal development recognizes uncertainty.
- Staff pointed out that because of a short time series of data; it is not known which levels of escapements produced the large escapements observed during the early years of the Niukluk River tower project.
- The management plan would direct the department to manage the same way whether it was a management or yield concern.
- Chum salmon market interest is coming back.
- For the Fish River drainage chum salmon population, 33% of chum salmon spawn in Niukluk River drainage. Niukluk River is a tributary to Fish River.
- Is raising the goal or keeping the old goal going to make a difference? Exploitation rates have been about 5%.

#### **Public Panel Comments:**

- NSEDC representatives noted that the new SEG threshold of >23,000 chum salmon is a 25 % reduction in Niukluk River escapement goal.
- Subdistrict 2 had the most productive chum salmon fishery in Norton Sound 25 years ago.
- Lowering the goal would make it unlikely to achieve large runs again and sustain commercial harvests.
- Disappointment was expressed that the method used to revise the goal was not based on maximum sustained yield.
- Justification implies that decision to lower the goal was based primarily on avoiding risk; specifically, that there would be less conflict and that it would be easier to sustain subsistence fisheries and easier to achieve escapement goals and avoid a management concern. Should not lower goals to simply avoid a management concern.
- Short time series for escapement goal analyses.
- Should be an OEG not an SEG.
- Kawerak, Inc. voiced its opposition to lowering escapement goals and added that they would like to see all Norton Sound escapement goals reviewed.

 NSEDC voiced support of both management plan alternatives to allow pink salmon fishing, but wanted to see if the department can allow coho salmon commercial fishing earlier in Moses Point.

# POSITIONS AND RECOMMENDATIONS

ADF&G Recommendation: Continue as yield concern for Subdistrict 1 chum salmon, Subdistricts 2 and 3 chum salmon, and Subdistricts 5 and 6 Chinook salmon.

Board Committee Recommendation: NA

PROPOSAL 68 – 5 AAC 01.120. Lawful gear and gear specifications. Expand hook and line use for subsistence from Cape Prince of Wales to Point Hope.

Staff Reports: None.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13.

Record Comments: RC 7, 8, 10, 11, 18, 55, 62, 72, 73, 75.

### **Narrative of Support and Opposition:**

### Department:

- Subsistence fishing permits are not required in this area. Harvest estimates come from periodic household harvest surveys conducted by Subsistence Division.
- About 10 % of local fish harvest is currently taken with rod-and-reel gear.
- Fish caught with a rod and reel and harvested are considered to be "subsistence-caught" only if they are taken from a stock that the board has determined to have customary and traditional subsistence uses.
- Subsistence opportunities are currently provided through seine and gillnet gear.
- Staff noted that Department of Law requested comments on the record regarding the efficiency of rod and reel gear.
- Reduction in license sales would result in loss of revenue to the department.
- If subsistence rod-and-reel limits are the same as sport fish limits, sport fish limits would only apply to subsistence rod-and-reel gear during open water periods, not to other subsistence gear such as gillnets, seines, or jigging through ice.
- Administratively, it will only be necessary to change the northern boundary of the rod-and-reel subsistence area from Cape Espenberg to Point Hope.
- The enforcement specialist stated that if subsistence rod-and-reel regulations were not identical to sport fishing regulations, large enforcement problems would occur.
- Would not need to purchase sport fish license.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- When hook-and-line subsistence became legal in northern Norton Sound in 2001, justification was to align regulations with current practice.
- It would be helpful to erase boundaries (i.e., to make rod-and-reel subsistence regulations the same throughout northwest Alaska).

- Rod-and-reel is efficient gear for people who can not afford a net.
- Rod-and-reel is efficient gear for people who do not want as many fish as can be caught in a net.
- If rod-and-reel is legal gear, people who are doing it anyway would not be breaking the law.
- Every fish is taken for subsistence, regardless of the gear.
- Rod-and-reel is legal subsistence gear under federal subsistence regulations.
- Using rod-and-reel, it is easier to control take.
- Harvest by rod-and-reel improves fish quality.
- If adopted, no license would be required for subsistence fishing.

### **Opposition:**

- Could lead to similar proposals for other areas.
- Are there reasons for this proposal, other than some fishermen are already doing it?

SSFP: Not discussed.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral. Allocative in nature.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to Support.

Board Committee Recommendation: Consensus to Oppose.

PROPOSAL 69 – 5 AAC 01.170 (b). Lawful Gear and Gear Specifications; and 5 AAC 01.172(a). Limitations on Subsistence Fishing Gear. Expand hook and line use for subsistence in southern Norton Sound, excluding Unalakleet River drainage.

Staff Reports: RC 4, Oral Tab 2, Written Tab 5.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 12, 18, 55, 72, 73.

### **Narrative of Support and Opposition:**

Department: None.

Department of Law: None.

Federal Subsistence Representative: None.

### Support:

Same as 68.

#### **Opposition:**

Same as 68.

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to Oppose.

PROPOSAL 70 - 5 AAC 01.172. Limitations on subsistence fishing gear. Allow snagging in freshwater for non-salmon species in Nome and Port Clarence.

Staff Reports: RC 4, Oral Tab 2, Written Tab 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: PC 8, 9.

Record Comments: RC 9, 18, 73.

### **Narrative of Support and Opposition:**

### Department:

- Rod-and-reel is already legal subsistence gear in this area.
- Some species listed in the proposal can be snagged already in marine waters.
- Proposal resulted from an enforcement incident, when an officer encountered an elder snagging whitefish in upper Kuzitrin River in September.
- Citations were not issued during the incident that initiated this proposal.
- People traditionally seined spawning whitefish in upper Kuzitrin River.
- Proposal intended for whitefish in fall, but written so snagging could occur anytime.
- Snagging for freshwater species is prohibited statewide. If allowed for one species in one area, it will be proposed for other species in other areas.
- If adopted, proposal would create a major difference between sport and subsistence regulations, requiring enforcement officers to check individual-by-individual.
- Subsistence opportunities for freshwater fish are provided for by existing methods and means.
- This area does not experience much sport fishing.
- If snagging were legal for non-salmon species, salmon could be "inadvertently" snagged in many streams in Norton Sound. There are not many salmon in upper Kuzitrin drainage.
- May cause mortality of fish not landed.
- Proposal was not clear about the area that would be affected.

Department of Law: None.

Federal Subsistence Representative: None.

### **Support:**

- Snagging has been occurring.
- Public wants particular methods recognized in regulations.
- The proposal specifies burbot, whitefish, cod, smelt, and suckers, most of which do not normally bite hooks.
- Spawning run of whitefish is of good quality.
- Snagging would occur in a traditional whitefish seining location.

### Opposition:

• Other methods are currently available.

SSFP: Not discussed.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to Oppose.

PROPOSAL 71 – 5 AAC 01.170(e). Lawful gear and gear specifications. Allow seining for salmon in Nome Subdistrict.

Staff Reports: RC 4, Oral Tab 2, Written Tab 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 18, 71, 73.

### Narrative of Support and Opposition:

### Department:

- The proposal would allow beach seines during scheduled periods.
- Currently only allowed by emergency order during times of high abundance usually in even numbered years for pink salmon.
- Beach seines were restricted in 1992 to be allowed by emergency order.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

**Opposition:** None.

SSFP: Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to oppose.

Board Committee Recommendation: Consensus to Oppose

PROPOSAL 72 – 5 AAC 01.170. Lawful gear and gear specifications; 5 AAC 04.395. Subdistricts 5 and 6 of the Norton Sound District and the Unalakleet River King Salmon Management Plan. Review Unalakleet King Salmon Management Plan and modify mesh size.

Staff Reports: RC 4, Oral Tab 2, Written Tab 5.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9, Advisory Committee Comment Tab, AC 3.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 12, 17, 18, 55.

### Narrative of Support and Opposition:

### Department:

- Department described how inriver mesh size restrictions to 6 inches have essentially closed down the inriver subsistence fishery in late June because fishermen did not want to harvest chum and pink salmon that would be caught with 6-inch gear. Allowing 7-inch or less mesh size provides additional opportunity to harvest king salmon while minimizing the incidental harvest of chum and pink salmon which are less desirable to subsistence users.
- Allowing 7-inch mesh also would reduce harvest of large female king salmon.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None

**Opposition:** None.

**SSFP:** Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to Support.

**PROPOSAL 73 – 5 AAC 04.310. Fishing Seasons.** Change opening dates for Port Clarence District sockeye salmon fishery.

Staff Reports: None.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 18, 23, 42, 55.

### **Narrative of Support and Opposition:**

#### Department:

- Allow Port Clarence commercial fishery to start as early as June 15. This fishery currently can be opened by emergency order from July 1 through July 31.
- Department does not plan to continue financial support for fertilization of Salmon Lake.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

#### **Opposition:**

- NSEDC withdrew its support on this proposal.
- NSEDC plans to continue fertilization next summer; belief that large sockeye salmon runs and depleted plankton caused population crash. NSEDC is funding limnology studies.
- Escapement peaked at 10.5 times the high end of the escapement goal at Salmon Lake. Sockeye salmon runs to Glacial Lake (not fertilized) peaked 7 times the high end of the escapement goal one year later. Both systems crashed in 2009.
- Over-escapement is a result of limited fishing power.

SSFP: Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Withdrawal of support.

Board Committee Recommendation: Take No Action.

PROPOSAL 74 – 5 04.200(b)(a). Fishing districts and subdistricts. Expand boundaries of Norton Sound Subdistrict 3.

Staff Reports: RC 4, Oral Tab 2, Written Tab 4.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13.

Record Comments: RC 16, 18, 25, 55.

### Narrative of Support and Opposition:

### Department:

- Benefits of expanding the boundaries of Subdistrict 3 include reduced commercial fishing effort near river mouths and reduced the number of water-marked fish in commercial catch.
- The committee asked department staff if there would be a significant increase in commercial harvest if the boundaries are expanded. Department staff anticipate a slight increase in harvests, but reiterated that commercial effort is currently limited to 9-12 permit holders.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

**Opposition:** None.

SSFP: Not discussed.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to Support.

**PROPOSAL 75 – 5 AAC 04.330. Gear.** Expand use of drift gillnets to Port Clarence District.

Staff Reports: None.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 18, 23, 42, 55.

### Narrative of Support and Opposition:

### Department:

- Currently, only set gillnet commercial fishing is allowed.
- Closed since 1966 and reopened in 2007 for sockeye salmon (3 fishermen participated).
- The department must project that the inriver run goal of 25,000 sockeye salmon will be reached for a commercial fishery to occur.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

#### **Opposition:**

- Currently there are not many fish returning.
- NSEDC thinks there is a conservation issue.
- Drift fishing would increase harvest.
- Panel member said his village would like to see commercial fishing closed because their subsistence needs have not been met.
- Nome Fisherman's Association does not represent all commercial fishing groups.

**SSFP:** Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral. Allocative in nature.

AC Positions: Support: None.

Oppose: None.

01/28/10

Public Panel Recommendation: Consensus to oppose.

Board Committee Recommendation: Consenus to Oppose.

PROPOSAL 76 – 5 AAC 04.330. Gear. Allow purse seines to harvest pink salmon in Norton Sound.

Staff Reports: RC 4, Written Tab 4 and 5.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9, RC 12.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16, 17.

Record Comments: RC 12, 15, 18, 24, 55.

### **Narrative of Support and Opposition:**

### Department:

• Currently, only gillnets are allowed.

• 88-91 permit holders fished in each of the last two years. There are currently 180 permits.

### Department of Law:

• If this proposal were adopted, CFEC would need to review and take appropriate action to ensure that participation in the seine fishery is limited to gillnet permit holders. The board does not have the authority to limit participation.

Federal Subsistence Representative: None.

#### **Support:**

• If adopted, ADF&G manager could allow seining if pink salmon abundance warrants it.

#### **Opposition:**

- SNSAC voiced opposition because the fishery would be market-driven in southern Norton Sound and only a few fishermen can afford to participate in the fishery. A lot of fishermen will not be able to afford a seiner and it will cause political unrest. Instead, fish should be divided equally by continuing with the gillnet fishery.
- High risk for buyer.
- NSEDC is not ready for a pink salmon purse seine fishery due to logistical difficulties.
- Pink salmon are small in Norton Sound; two pound average weight.
- Concerns about new fishery because only every other year for about 2 weeks are there sufficient numbers of pink salmon to harvest. Fishermen from outside the area could participate in the fishery. This may be of minimal benefit to local residents due to gear costs and logistical difficulties.

SSFP: Not discussed.

# POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to Oppose.

**PROPOSAL** 77 – 5 AAC 04.330. Gear. Allow purse and beach seines in Norton Sound-Port Clarence.

Staff Reports: RC 4, Oral Tab 2, Written Tab 4 and 5.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 9, 12.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16, 17.

Record Comments: RC 18, 23, 24, 55, 75.

### **Narrative of Support and Opposition:**

### Department:

• Currently only gillnets are allowed.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

### **Opposition:**

• Same as proposal 76 with additional comments opposing commercial salmon fishing.

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to oppose.

Board Committee Recommendation: Consensus to Oppose.

(RC 16 – 5 AAC 04.390. Subdistricts 2 and 3 of the Norton Sound District Salmon Management Plan (b). Specify a date in Subdistricts 2 and 3 of the Norton Sound Salmon District Salmon Management Plan after which a pink salmon directed commercial fishery may be allowed.

Staff Reports: RC 4, Oral Tab 2, Written Tab 4.

Staff Comments: None.

**Deliberation Materials:** 

AC Reports: RC 9.

Timely Public Comment: None.

Record Comments: 1, 16, 24, 88.

### Narrative of Support and Opposition:

- Low chum salmon run and lots of pink salmon in even years.
- Currently cannot fish pink salmon if chum salmon escapement goal is not met in that subdistrict.
- Allowed to fish for chum salmon if projected to meet escapement. Could have a pink salmon fishery if this proposal was in effect.

### Department:

- Elim fishermen requested their AC representative recommend a proposal at the Northern Norton Sound AC meeting to allow them to fish pink salmon during large runs even if chum salmon do not meet escapement goals.
- No objection to this request at the northern Norton Sound AC meeting.

### Department of Law:

• Responded to question asking 'How significant impact is defined?' It is at the department's discretion.

Federal Subsistence Representative: None.

#### Support:

- For Kwiniuk River in 2004, pink salmon outnumbered chum salmon 300 to 1.
- July 6 is the average midpoint at Kwiniuk River tower for chum salmon passage.
- July 10 is the average midpoint at Kwiniuk River tower on even years for pink salmon passage.
- Few chum salmon are expected to be caught with 4.5-inch gear. There is a potential for few hundred caught in a season.
- Elim IRA council representative voiced support and noted that the IRA council passed a resolution to support this.

### **Opposition:**

- Subjective triggers are determined by the department.
- In some years, the run timings are close together.
- Pink salmon gear was catching chum salmon by their gill plates in southern Norton Sound.

• Concern about incidental catch affects on subsistence harvests in Nome subdistrict. Fewer chum salmon for Nome subdistrict if fishing is allowed in Elim.

SSFP: Not discussed.

### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No Consensus.

RC 17 – 5 AAC 04.395. Subdistricts 5 and 6 of the Norton Sound District and Unalakleet River King Salmon Management Plan. If there are restrictions or closures to the subsistence Chinook salmon fishery, allow a directed commercial chum or pink salmon fishery to be opened no earlier than July 1 in Subdistricts 5 and 6.

Staff Reports: RC 4, Oral Tab 2, Written Tab 5.

Staff Comments: None.

Deliberation Materials: None.

AC Reports: RC 9, Advisory Committee Comment Tab, AC 3.

Timely Public Comment: RC 1, Public Comment Tab, PC 13, 16.

Record Comments: RC 17.

### Narrative of Support and Opposition:

- Department staff explained how there have been near-record runs of chum salmon and record runs of pink salmon in recent years. However, the department has been unable to target these harvestable surpluses due to a lack of market interest and more recently, conservation concerns with king salmon, which have concurrent migration with chum and pink salmon.
- The board asked the department if determining whether or not a chum or pink salmon commercial fishery would have a significant impact on escapement or subsistence use of king salmon was a subjective decision, or if there were data to justify such a decision. Department staff responded by showing the figure on slide 17 of oral report (RC4, Tab 2) that illustrates Unalakleet Subdistrict marine subsistence catches of king salmon peak during the 3<sup>rd</sup> week of June and drop off sharply in early July.
- Even during times of low king salmon abundance, the vast majority of Unalakleet River king salmon would already be inriver at the onset of a commercial chum or pink salmon fishery.
- Since 2004, department staff also cited the highest incidental commercial catch of king salmon was 60 during the entire Subdistricts 5 and 6 commercial salmon fisheries in a single season.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

• NSEDC and (SNSAC) voiced their support for this modification to the Subdistricts 5 and 6 Chinook salmon management plan.

**Opposition:** None

**SSFP:** Not discussed

# **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: SNSAC.

Oppose: None.

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: No Consensus

PROPOSAL 78 – 5 AAC 27.965(m). Management for Herring Pound Norton Sound. Allow closed pounding for herring spawn-on-kelp in Norton Sound.

Staff Reports: None.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13.

Record Comments: RC 9, 12, 18, 55, 75.

### Narrative of Support and Opposition:

#### Department:

- Department discussed questions concerning the existing herring biomass allocation. Actual
  biomass of herring in Norton Sound required to produce 90 tons of product differs considerably
  from allocations in Prince William Sound and Togiak herring districts. In Norton Sound, 90 tons
  of spawn-on-kelp product is equivalent to 320 tons of herring biomass. In Prince William Sound
  and Togiak districts, spawn-on-kelp product only represents 8-12% of the actual spawning
  biomass.
- The department's enforcement specialist expressed concerns regarding the difficulty of enforcing volume regulations. That is, the amount of herring that can be enclosed within a pound. His experience in Southeast Alaska suggested that there can be high mortality of herring enclosed within pounds. He also indicated that the gear and requirements make closed pounding a very complicated endeavor.
- Herring need to be ripe before enclosed in pounds and viral infections can occur.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Kawerak Inc. voiced its support for this proposal, but asked the department to closely monitor it.
- NSEDC supported it because herring resource is underutilized and this fishery may provide economic benefit to local residents.
- NSEDC stated that there is a 7,500 ton GHL.

#### **Opposition:**

- SNSAC representative noted that the SNSAC supported initially, but later opposed at their January 2010 meeting.
- The public cited increased mortality issues due to enclosed pounds and that closed pounding is difficult because herring are at different depths.
- Herring spawn at different depths and will require different seines.
- Wild kelp is available for commercial harvests.

• If gear specifications are lacking it will lead to problems for enforcement.

SSFP: Not discussed.

## **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: SNSAC.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to Oppose.

PROPOSAL 79 – 5 AAC 27.965(a) & (m). Management Plan for Herring Pound Spawn-On-Kelp Fishery in the Norton Sound District. Allow closed pounding for herring in Norton Sound and Port Clarence.

Staff Reports: None.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: None.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13.

Record Comments: RC 9, 12, 18, 55, 75.

### Narrative of Support and Opposition:

### Department:

- This proposal is nearly identical to proposal 78, except it would also apply to the Port Clarence district.
- Pounding is not currently allowed in any form in Port Clarence District.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

#### **Opposition:**

- NSEDC and NNSAC representatives voiced opposition to this proposal, but noted that the NSEDC Board of Directors and NNSAC were in favor of establishing an open pound herring fishery in Port Clarence District.
- Their positions were based primarily on conservation concerns related to incidental harvest of non-target species that are important to local subsistence users.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: NNSAC opposed, with suggestion to amend to allow open pounding in Port

Clarence District.

Public Panel Recommendation: No Consensus.

Board Committee Recommendation: Consensus to Oppose.

PROPOSAL 80 - 5 AAC 70.011(c)(3)(d). Seasons, bag, possession, and size limits for the Northwestern Management Area. Amend sport fishing bag limits for chum salmon in Norton Sound.

Staff Reports: RC 3, Written Tab 3.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9, 13, 16.

Record Comments: RC 16, 18, 55.

## **Narrative of Support and Opposition:**

#### Department:

- Currently rod-and-reel is legal subsistence gear for chum salmon in this area.
- Proposal submitted by a Nome area guide, whose clients want to catch "calico" (chum) salmon.
- Currently a stock of yield concern for Nome subdistrict chum salmon.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

• Benefit nonresident anglers who want to catch chum salmon.

#### **Opposition:**

• Offensive to subsistence users, "playing with food."

**SSFP:** Not discussed.

### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to oppose.

Board Committee Recommendation: Consensus to Oppose.

# **RC 78**

# Alaska Board of Fisheries Committee Report

# **COMMITTEE C**

# Yukon Area Salmon and Freshwater Fish

January 28, 2010

#### **Board Committee Members:**

- 1. Mel Morris, Chair
- 2. Janet Woods
- 3. Howard Delo

## Alaska Department of Fish and Game Staff Members:

- 1. Steve Hayes, Summer Season Area Manager, CF
- 2. Eric Newland, Summer Season Assistant Area Manager, CF
- 3. Dayna Norris, Fall Season Assistant Area Manager, CF
- 4. Bonnie Borba, Fall Season Research Biologist, CF
- 5. Katie Howard, Summer Season Research Biologist, CF
- 6. Dani Evenson, Regional Research Supervisor, CF
- 7. Dan Bergstrom, Regional Management Supervisor, CF
- 8. John Linderman, Regional Supervisor, CF
- 9. Deena Jallen, Fishery Biologist, CF
- 10. Matt Evenson, Regional Research Supervisor, SF
- 11. John Burr, Yukon Area Manager, SF
- 12. Audra Brase, Lower Tanana Area Manager, SF
- 13. Fronty Parker, Upper Tanana Area Manager, SF
- 14. James Savereide, Research Biologist, SF
- 15. Caroline Brown, Subsistence Resource Specialist, Subsistence
- 16. Desiree Tollette, Program Technician, CF
- 17. Jim Simon, Regional Supervisor, AYK Subsistence
- 18. John Hilsinger, Director, CF
- 19. Sue Aspelund, Deputy Director, CF

## **Advisory Committee Members:**

- 1. Stanislaus Sheppard, Lower Yukon AC
- 2. Adlai Alexander, Yukon Flats AC
- 3. Andrew Firman, Eastern Interior RAC
- 4. Virgil Umphenour, Fairbanks AC

- 5. Timothy Gervais, Western Interior RAC & Ruby AC
- 6. Stan Zuray, Tanana/Rampart/Manley AC
- 7. Victor Lord, Minto Nenana AC
- 8. Andy Bassich, Eagle AC
- 9. Bill Derendoff, Koyukuk River AC
- 10. Rich Burnham, Middle Yukon AC
- 11. Raymond Oney, YK Delta RAC
- 12. Elias Kelly, YK Delta RAC

#### Public Panel Members:

- 1. Gene Sandone, Yukon Delta Fisheries Development Association (YDFDA)
- 2. Erik Weingarth, St. Mary's, self
- 3. Francis Thompson, St. Mary's, self
- 4. Leslie Hunter, Marshall, self
- 5. Jill Klein, Yukon River Drainage Fisheries Association (YRDFA)
- 6. Martin B. Moore, Wade Hampton
- 7. Jack Schultheis, Kwik Pak Fisheries
- 8. Larry Nathaniel, Yukon Flats-Circle, AK Yukon Flats/Upper Yukon
- 9. Billy Charles, Lower Yukon
- 10. James Kelly, Ft. Yukon, self
- 11. Mike Smith, Tanana Chiefs Conference (TCC)
- 12. Phillip Covlasky, Emmonak, self
- 13. Kathleen Peters Zuray, Tanana
- 14. Art Nelson, Bering Sea Fisherman's Association (BSFA)
- 15. Ragnar Alstrom, YDFDA
- 16. Timothy Andrew, Association of Village Council Presidents (AVCP)
- 17. Anna Pratt, Yupiit of Andreafsky
- 18. Bill Alstrom, St. Mary's, self
- 19. Nicholas C. Tucker, Lower Yukon
- 20. Martin B. Moore, Wade Hampton Census area
- 21. Evan Charles, Lower Yukon

## Federal Subsistence Representative:

- 1. Pete Probasco, USFWS OSM
- 2. Rod Campbell, USFWS OSM
- 3. Dave Krupa, NPS
- 4. Rob Jess, Yukon Flats NWR
- 5. Richard Cannon, USFWS OSM
- 6. Fred Bue, USFWS
- 7. Gerald Maschmann, USFWS
- 8. Dave Mills, NPS
- 9. Aaron Martin, USFWS

The Committee met January 28, 2010 at 8:15 a.m. and adjourned at 5:15 p.m.

PROPOSALS BEFORE THE COMMITTEE WERE: (23 total) 81-100, 193, 194, and 199.

YUKON STOCKS OF CONCERN: Chinook Stock of Yield Concern

Staff Reports: RC 4, Oral Tab 3, Written Tab 6.

**ADF&G Recommendation:** Continuation of the yield concern classification for the Yukon River Chinook salmon stock.

#### Discussion:

- Yield vs. management concern was discussed.
- Action plan alternatives will be taken up under proposals 89 and 90.
- Clarification on the definition of a yield concern; it was explained that yield concern is a regulatory definition and not arbitrarily designated

## **POSITIONS AND RECOMMENDATIONS**

Board Committee Recommendation: Consensus to support

**PROPOSAL 81 – 5 AAC 01.210. Fishing Seasons and Periods.** Clarify subsistence fishing schedule in Subdistricts 4-B and 4-C.

Staff Reports: RC 4, Oral Tab 3 and 6, Written Tab 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 3, 5, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 4, 8, 9, 15, 18.

Record Comments: RC 21, 27, 51, 63, 64, 67.

## Narrative of Support and Opposition:

#### Department:

• Adopting this schedule would match regulations with current management practices, eliminate the need for issuing an emergency order to change the existing regulation, and be less confusing for the public.

Department of Law: None.

Federal Subsistence Representative: Support as a housekeeping measure.

#### **Support:**

• Generally supported after clarification.

#### **Opposition:**

- Need more clarification on what this seeks to do; users in Subdistrict 4-C (Ruby) were unsure of intent.
- Would like the opportunity to fish longer on the first pulse.

SSFP: Not discussed.

## **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: Ruby.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to support

PROPSAL 82 – 5 AAC 01.210. Fishing Seasons and Periods. Modify subsistence fishing schedule in Subdistrict 4-A.

Staff Reports: RC 4, Oral Tab 3 and 6, Written Tab 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 3, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 4, 15, 18.

Record Comments: RC 21, 27, 51, 63, 64, 67.

# Narrative of Support and Opposition:

## Department:

- In recent years, fishery managers have allowed subsistence and commercial fishing to take place concurrently through use of emergency orders.
- Adopting this schedule would match regulations with current management practices and eliminate the need for issuing emergency orders to change existing regulations.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- Would make the fishery consistent with upper river subdistricts.
- Commercial fishery openings will not affect the subsistence fishery schedule.

Opposition: None.

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support.

AC Positions: Support: Middle Yukon

Fairbanks.

Oppose: None.

Public Panel Recommendation: Consensus to Support.

Board Committee Recommendation: Consensus to support

**PROPOSAL 83 – 5 AAC 01.230. Subsistence Fishing Permits.** Require recording subsistence harvest on catch calendars.

Staff Reports: RC 4, Oral Tab 3 and 6, Written Tab 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 4, 8, 9, 15, 18, 21.

Record Comments: RC 14, 20, 21, 27, 38, 51, 57, 63, 64, 67, 71.

## **Narrative of Support and Opposition:**

## Department:

- Department is supportive of seeking methods by which improved harvest recording can be accomplished.
- Would essentially require a permit for subsistence fishing.
- Requiring harvest recording of all species would reduce the timeliness of data gathering as some fish species are harvested throughout the year.

Department of Law: None.

#### Federal Subsistence Representative:

- Oppose as written; support the intent, but do not believe it will be effective without consensus.
- Support providing better information to managers and elimination of illegal commercial enterprises.

#### **Support:**

- Collecting uniform and complete harvest information is important.
- Could potentially reveal more accurate harvest levels.

#### **Opposition:**

- Potential fines for not filling out the calendar and having it available.
- Would be difficult for fishermen to fill out the calendar at their fishing location and could present a safety hazard.
- Does not specify harvest of salmon species. Catch calendars for all species would require fishermen to keep the calendar almost year-round.
- Could cause enforcement issues with numerous minor violations.
- Logistic difficulties with implementation.
- Data uncertainty.

Committee encouraged Fairbanks AC to work with ADF&G, USFWS, and Enforcement to work on this issue.

SSFP: Not discussed.

## **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose as written.

AC Positions: Support: Fairbanks

Ruby - support with amendments

Nenana/Minto.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose

**PROPOSAL 85 – 5 AAC 01.220. Lawful gear and gear specifications.** Extend Subdistricts 4-B and 4-C drift gillnet area for kings and fall chum.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6 and 8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 8, 15, 18, 21.

Record Comments: RC 14, 20, 21, 27, 38, 51, 63, 64, 67, 71.

## Narrative of Support and Opposition:

#### Department:

• There are allocative aspects to this proposal.

- Subsistence uses are being met with current allowable fishing gear and locations.
- Concern about increased harvest on Canadian-origin king salmon stocks migrating farther upriver; could allow fishermen to harvest further offshore, which could increase interception of Canadian-origin fish.
- Could set a precedent for extending use of drift gillnet further upriver.

Department of Law: None.

Federal Subsistence Representative: Support; would like to include all of Subdistricts 4-B and 4-C.

## **Support:**

- Alleviate congestion at prime fishing locations.
- Reduce travel to fishing site.

#### **Opposition:**

- Biological concerns for higher harvest, particularly on Canadian-origin fish.
- Could have treaty implications
- Can allow for more time by emergency order authority

SSFP: Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral on allocative aspects of this proposal, but oppose because of management and biological concerns.

AC Positions: Support: Middle Yukon

Ruby.

Oppose: Tanana/Rampart/Manley

Eagle Fairbanks.

Public Panel Recommendation: No Consensus.

Board Committee Recommendation: Consensus to oppose

**PROPOSAL 84 – 5 AAC 01.220. Lawful gear and gear specifications.** Extend Subdistricts 4-B and 4-C drift gillnet area for king salmon.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 8, 15, 18, 21.

Record Comments: RC 14, 20, 21, 27, 38, 51, 71, 63, 64, 67.

## Narrative of Support and Opposition:

#### Department:

- There are allocative aspects to this proposal.
- Subsistence harvest data and public input indicate subsistence uses are being met with the current allowable fishing gear and locations, except when restrictions are necessary to achieve escapement goals.
- Allowing drift gillnet fishing will likely increase harvest rate on Canadian-origin king salmon stocks migrating farther upriver, and possibly have treaty implications.

Department of Law: None.

Federal Subsistence Representative: Support with the modification of including all of Subdistricts 4-B and 4-C.

#### **Support:**

- Reduce travel to fishing site.
- Alleviate congestion at prime fishing locations.
- Provide additional fishing opportunity.

#### **Opposition:**

- Unfair for drifting to be allowed only in some areas of the river.
- Biological concerns for higher harvest, particularly on Canadian-origin fish.
- Can allow for more time by emergency order authority.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal, but oppose because of management and biological concerns.

AC Positions: Support: Middle Yukon.

Oppose: Fairbanks

Tanana/Rampart/Manley.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No action.

**PROPOSAL 86 – 5 AAC 01.220.** Lawful gear and gear specifications. Allow set gillnets to be tied up during closures in Subdistrict 5-D.

Staff Reports: RC 4, Oral Tab 3 and 6, Written Tab 6 and 8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 4, 8, 9, 15, 18, 21.

Record Comments: RC 13, 14, 20, 21, 27, 38, 51, 63, 64, 67, 71, 95.

#### Narrative of Support and Opposition:

#### Department:

• Tying up gillnet web does not eliminate the possibility of killing salmon during fishing closures.

Department of Law: None.

Federal Subsistence Representative: Neutral; refer to PC 8.

#### Support:

• Improved safety for fishermen.

#### **Opposition:**

- Enforcement would be difficult. Nets would have to be inspected in person to determine if it was tied up.
- Would need to define 'tied up' and what that would require.
- Alternative methods are available to alleviate safety concerns, including leaving buoys, running line, and anchors in place
- Potential for ghost net fishing resulting from loss of nets.
- Could set precedent and is inconsistent with the rest of the river.
- Unclear how tying up webbing would be safer than pulling net from water.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose.

AC Positions: Support: Eagle

Fairbanks.

Oppose: Lower Yukon.

Public Panel Recommendation: No Consensus.

Board Committee Recommendation: Consensus to oppose.

PROPOSAL 87 – 5 AAC 05.360. Yukon River King Salmon Management Plan. Review triggers, GHR, fishing schedule in king salmon management plan.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 5, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 4, 8, 9, 15, 21.

Record Comments: RC 13, 20, 21, 26, 27, 51, 63, 64, 67, 71.

#### Narrative of Support and Opposition:

#### Department:

- Supports allowing subsistence fishing seven days a week in Innoko River.
- Department routinely establishes seven days a week subsistence fishing in Innoko River, similar to Koyukuk River.
- Low effort and difficult fishing conditions appear to affect fishing success more than fish abundance.

Department of Law: None.

Federal Subsistence Representative: Neutral on management plan, but supports increased subsistence opportunity in Innoko River. Other comments, refer to PC 8.

## **Support:**

- Regulations would match current management practice.
- Minimal harvest and effort.
- Innoko River stocks are not believed to be a biological concern.
- Supported subsistence fishing in the Innoko River, but concern was expressed about opening up management plan.

Opposition: None.

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support change in subsistence fishing schedule for Innoko River drainage.

AC Positions: Support: None.

Oppose: None

Public Panel Recommendation: Consensus to support.

Board Committee Recommendation: Consensus to support.

PROPOSAL 88 – 5 AAC 05.331. Gillnet specifications and operations; and 5 AAC 01.220. Lawful gear and gear specifications. Prohibit drift gillnet gear for subsistence and commercial fishing.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 7, 8, 9, 11, 15, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 35, 38, 40, 41, 44, 45, 51, 52, 53, 57, 60, 63, 64, 69, 70, 71, 84, 87, 89, 91.

## Narrative of Support and Opposition:

## Department:

- There are allocative aspects to this proposal.
- No biological basis for prohibiting use of drift gillnet gear for all fisheries year-round.
- Unclear why proposal appears to address king salmon only, which run during June and July, yet the intent of the proposal is to prohibit use of drift gillnets year-round.
- Drift gillnet gear is recognized in the customary and traditional (C&T) use worksheet adopted by the board, and it is noted that drift gillnets are the predominant gear type used on the lower river.
- Subsistence and commercial fishermen, particularly on the lower and middle river, would be required to expend more effort to harvest salmon.
- Decreased harvest by subsistence and commercial drift gillnets may reallocate harvest opportunity to other gear types and user groups.
- Concern over the competition that would arise from 500 fishermen seeking new set gillnet sites.
- Without drift gillnet gear, large surpluses of salmon, such as during the record fall chum and summer chum salmon runs in 2005 and 2006, would go unharvested.

Department of Law: None.

Federal Subsistence Representative: Neutral; refer to PC 8.

Support: Reference public testimony in support of the proposal to reduce harvest of larger king salmon.

#### **Opposition:**

- Few set gillnet sites available.
- Reduction of harvest power.
- Potential for over-escapement.

Work group established to achieve consensus regarding proposals 88, 89, 90, and 94.

**SSFP:** Not discussed.

## POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

PROPOSAL 89 – 5 AAC 05.331. Gillnet specifications and operations; and 5 AAC 01.220. Lawful gear and gear specifications. Restrict depth of subsistence and commercial 6-inch mesh to 35 meshes.

Note: Proponent clarified that this proposal if for 6-inch and larger mesh size gillnets.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 8, 9, 11, 15, 18, 21.

Record Comments: RC 6, 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 51, 52, 53, 56, 57, 60, 63, 64, 67, 68, 69, 71, 84, 87, 89, 91, 96.

# Narrative of Support and Opposition:

Note: Option C in Action 1 of RC 4, Tab 6 was discussed. This option focused on reducing gillnet depth.

## Department:

- This proposal is unclear.
- It is local traditional belief that larger king salmon travel deeper in the water column; however, this is not substantiated by empirical data.
- A decrease in gillnet depth may reduce efficiency and thus require fishermen to expend more effort to harvest salmon needed for subsistence or commercial purposes.
- It appears that the intent of this proposal is to reduce large female king salmon harvest. However, placing additional limits on the depth of gillnet gear of only 6-inch mesh, which is used to target summer chum, fall chum, and coho salmon, would not accomplish this goal.
- An increase in effort required by gillnet fishermen to harvest salmon for subsistence and commercial uses may reallocate harvest opportunity to other gear types or user groups.

Department of Law: None.

Federal Subsistence Representative: Neutral.

## **Support:**

- Reference public testimony in support of this proposal to reduce harvest of larger king salmon.
- Shallower nets could help the king salmon stock.

#### **Opposition:**

- Would prefer to protect the first pulse instead of making gear changes.
- Concern of fish snagging teeth and dropping out of small mesh nets.

Work group established to achieve consensus regarding proposals 88, 89, 90, and 94.

**SSFP:** Not discussed.

# POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

PROPOSAL 90 – 5 AAC 05.331. Gillnet specifications and operations; and 5 AAC 01.220. Lawful gear and gear specifications. Prohibit subsistence and commercial gillnets over 6-inch mesh size.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 8, 9, 15, 18, 21.

Record Comments: RC 6, 13, 14, 19, 20, 21, 26, 27, 33, 34, 38, 39, 41, 44, 45, 51, 52, 53, 57, 60, 63, 64, 67, 68, 69, 71, 84, 87, 89, 91, 96.

#### Narrative of Support and Opposition:

Note: Options A, B, C, and D in Action 1 of RC 4, Tab 6 were discussed. Option A focused on reducing exploitation rates; Option B focused on reducing gillnet mesh size; Option C focused on reducing gillnet depth; and Option D focused on other gear considerations.

Note: Additionally, there were questions and ensuing discussion regarding the necessity of fish wheel restrictions.

#### Department:

- There are allocative aspects to this proposal.
- Restricting subsistence gillnet mesh size to 6-inch or smaller may not provide reasonable opportunity for subsistence use of king salmon; the board would need to make this determination.
- Restrictions would likely result in incidental harvest of summer chum salmon above desired levels.

Department of Law: None.

Federal Subsistence Representative: Neutral.

#### Support:

- Using 6-inch mesh would protect the stock; 7.5-inch mesh would harvest the next largest size class; current fishing practices would continue to target large females.
- Fishermen are adaptable and will learn to work with new restrictions to catch their fish.

#### **Opposition:**

- Exploitation rate (Option A of Action 1 in RC 4, Tab 6) may work and shares the burden among
- Would affect the ability to harvest fish.
- Would incur a monetary burden on fishermen to buy new gear.
- Reduces subsistence harvest opportunity.
- The merit of mesh size study was questioned.

• Drop-out rates are a concern.

Work group established to achieve consensus regarding proposals 88, 89, 90, and 94.

**SSFP:** Not discussed.

## **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal. Oppose the aspects that limit management flexibility and may cause wastage.

AC Positions: Support: Fairbanks

Eagle.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

PROPOSAL 193 – 5 AAC 05.362. Yukon River Summer Chum Salmon Management Plan. Revise the management triggers in the Yukon River Summer Chum Salmon Management Plan.

Staff Reports: RC 4, Oral Tab 3, Written Tab 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 8, 9, 18.

Record Comments: RC 2 Tab 6, RC 51, 91.

## Narrative of Support and Opposition:

#### Department:

• Wording is awkward and problematic as written.

- Summer chum salmon escapement goals exist for select tributaries, but not for the Yukon River as a whole.
- Using the midpoint of the ANS range in developing a trigger, or the upper end of this range as a cap, may be inappropriate because subsistence use may fluctuate through time.
- The established OEG of 600,000 fish must remain in regulation to conserve this stock.

Department of Law: None.

Federal Subsistence Representative: Neutral.

#### **Support:**

- Allowing commercial fishing at lower threshold levels could maintain commercial fishing markets and viability.
- Wide ranges of escapements could produce similar returns. Taking more chum salmon commercially may not affect sustainability of the run.

# **Opposition:**

- Wording is confusing.
- There should be no changes to management plans until a riverwide forum is available.
- Poor assessment in the past has resulted in lower river commercial openings, followed by upper river subsistence restrictions.

SSFP: Not discussed.

## POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose as written, but neutral on modifying triggers.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

Substitute Language:

5 AAC 05.362. Yukon Rive Summer Chum Management Plan. Amend with new subsection (i)

(i) Notwithstanding (d) and (e) of this section, when the projected run size is more than 900,000, but not more than 1,000,000 fish, the commissioner may open, by emergency order, a drainagewide commercial fishery to harvest up to 50,000 fish above the run size of 900,000 chum salmon distributed by district or subdistrict in proportion to the guideline harvest levels established in (f) of this section.

PROPOSAL 194 – 5 AAC 01.249. Yukon River Drainage Fall Chum Salmon Management Plan. Revise the management triggers in the Yukon River Fall Chum Management Plan.

Staff Reports: RC 4, Oral Tab 1 and 3, Written Tab 2 and 8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 8, 9, 18.

Record Comments: RC 51, 91.

## Narrative of Support and Opposition:

#### Department:

- Review management plan to replace specified numerical threshold triggers for management
  actions with terminology relative to current biological escapement goals and consideration for
  existing ANS levels. Additionally, this proposal would allow commercial fishing at lower run
  sizes.
- Using the upper end of the ANS range as a cap may be inappropriate because subsistence use may fluctuate through time.
- Inseason run assessment is difficult and has sometimes resulted in unharvested surpluses, as well as commercial fishing openings and subsequent subsistence fishery restrictions.
- Spawner-recruit analysis of fall chum salmon indicates there is a wide range of escapement that will provide similar yield.
- To maintain commercial markets, it is necessary to have some harvest when biologically allowable.
- The wording is confusing.
- The department could provide numerical threshold values that would reflect the level suggested in this proposal relative to the escapement goal and ANS values.
- The department was uncomfortable with allowing a drainagewide fall chum salmon commercial fishery at run sizes below 500,000.

Department of Law: None.

Federal Subsistence Representative: Neutral; refer to PC 8.

#### Support:

- Interested in reviewing changes, but with riverwide input.
- Changes to upper end of threshold may allow some commercial harvest on an additional 100,000 to 130,000 fish.
- Potential increased economic value and maintenance of commercial markets.
- Reduce forgone harvest.

#### **Opposition:**

- Wording is confusing.
- Lack of opportunity for riverwide group to discuss changes to management plans.
- Concern about possibility of commercial fishing in lower river occurring and subsequent subsistence restrictions in upper river.

Committee C Report

- Suggestion to have YRDFA work on this in the future.
- Some participants were unaware of this proposal.
- Board generated proposal at the October work session and not included in the original proposal book.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: None.

Oppose: Tanana/Rampart/Manley

Fairbanks Eagle.

Public Panel Recommendation: No Consensus.

Board Committee Recommendation: Consensus to support with substitute language.

Substitute Language:

5 AAC 01.249 (3)(c) and (5) are amended.

## 5 AAC 01.249. Yukon River Drainage Fall Chum Salmon Management Plan

- (3) (C) department shall manage the subsistence chum salmon directed fisheries to achieve the targeted drainagewide escapement goal; [EXCEPT THAT IF INDICATORS SUGGEST THAT AN INDIVIDUAL ESCAPEMENT GOAL IN A SUBDISTRICT, DISTRICT, OR A PORTION OF A SUBDISTRICT OR DISTRICT WILL BE ACHIEVED, THE COMMISSIONER MAY, BY EMERGENCY ORDER, OPEN A LESS RESTRICTIVE SUBSISTENCE DIRECTED CHUM SALMON FISHERY IN THAT SUBDISTRICT, DISTRICT, OR PORTION OF THE SUBDISTRICT OR DISTRICT;]
- [(4) WHEN THE PROJECTED RUN SIZE IS MORE THAN 500,000 CHUM SALMON, THE
- (A) TARGETED DRAINAGEWIDE ESCAPEMENT GOAL IS 300,000 OR MORE CHUM SALMON;
- (B) COMMISSIONER MAY, BY EMERGENCY ORDER, OPEN A

(I) SUBSISTENCE FISHERY ACCORDING TO THE FISHING SEASONS AND PERIODS SPECIFIED IN 5 AAC 01.210(C) - (H) AND 5 AAC 05.367; AND

Committee C Report

- (II) PERSONAL USE FISHERY AND SPORT FISHERY TO ALLOW THE RETENTION OF CHUM SALMON; AND
- (C) IF INDICATORS SUGGEST THAT AN INDIVIDUAL ESCAPEMENT GOAL AND IDENTIFIED SUBSISTENCE NEEDS IN A SUBDISTRICT, DISTRICT, OR A PORTION OF A SUBDISTRICT OR DISTRICT WILL BE ACHIEVED, THE COMMISSIONER MAY, BY EMERGENCY ORDER, OPEN A COMMERCIAL FISHERY IN THAT SUBDISTRICT, OR PORTION OF THAT SUBDISTRICT OR DISTRICT;
- (4) [(5) IN ADDITION TO THE FISHERIES SPECIFIED IN (4) OF THIS SECTION,] when the projected run size is more than [600,000] 500,000 chum salmon, the commissioner may, by emergency order, open a drainagewide commercial fishery and manage the fall chum salmon fisheries to achieve escapements within the established drainage escapement goal range of 300,000-600,000 chum salmon. [WITH] The targeted harvest of the surplus [ABOVE 600,000 CHUM SALMON DISTRIBUTION] will be distributed by district or subdistrict proportional to the guideline harvest range established in 5 AAC 05.365; the department shall distribute the harvest levels below the low end of the guideline harvest range by district or subdistrict proportional to the midpoint of the guideline harvest range;

## 5 AAC 05.369. Yukon River Coho Salmon Management Plan Amend (a) (2) and (d)

- (a) (2) the fall chum salmon return is assessed by the department to be more than <u>500,000</u> [550,000] fish;
- (d) Fall chum salmon harvested during a directed commercial coho salmon fishery under this section will be considered incidental and may only occur on the harvestable surplus of fall chum salmon above **500,000** [550,000] fish.

PROPOSAL 92 – 5 AAC 05.362. Yukon River Summer Chum Salmon Management Plan. Prohibit sale of king salmon during non-king salmon directed fisheries.

Staff Reports: RC 4, Oral Tab 3, Written Tab 6 and 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 8, 9, 10, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 51, 52, 53, 60, 63, 64, 67, 68, 71, 84, 87, 89, 91.

## Narrative of Support and Opposition:

#### Department:

- This requirement would be utilized when there is not a surplus of king salmon available for commercial harvest.
- Prohibition of king salmon sales is a viable option to provide opportunity to harvest abundant summer chum salmon, while reducing the incentive to harvest non-targeted king salmon when king salmon run strength is poor.

Department of Law: None.

Federal Subsistence Representative: Neutral.

## Support:

- Most important to enact during times of conservation.
- Suggested amendment to provide department emergency order authority to restrict sales.
- Suggested amendment to prohibit sale until after most Canadian-origin stocks have passed the lower river.
- Concern about possibility of commercial fishing in lower river occurring while subsistence is restricted in upper river.

#### **Opposition:**

- Potential loss of economic value of the fishery.
- An alternative would be to delay commercial fisheries on chum salmon, allowing the majority of Canadian-origin king salmon to pass, and reducing incidental harvest on Canadian-origin king salmon.

Work group was established to come to consensus on proposals 91 and 92.

SSFP: Not discussed.

## **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose as written, but support emergency order authority.

AC Positions: Support: Tanana/Rampart/Manley

Middle Yukon-supports an amendment.

Oppose: Lower Yukon.

Public Panel Recommendation: Consensus to Support with following:

No sale of incidental king salmon harvest during chum salmon-directed fisheries in years where subsistence fishing for king salmon is restricted in all districts.

Board Committee Recommendation: Consensus to support.

Substitute Language:

5 AAC 05.360. Yukon River King Salmon Management Plan.

(i) When king salmon subsistence fishing is restricted in more than one district or portion of a district, the commissioner may, by emergency order, close a fishery and reopen a fishery during which king salmon taken may be retained but not sold.

PROPOSAL 91 – 5 AAC 05.362. Yukon River Summer Chum Salmon Management Plan. Limit commercial king salmon harvest during chum salmon-directed fisheries.

Staff Reports: RC 4, Oral Tab 3, Written Tab 6 and 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 10, 15, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 51, 53, 57, 58, 60, 63, 64, 67, 68, 71, 84, 87, 89, 91.

## Narrative of Support and Opposition:

## Department:

- Establishing a quota to limit king salmon incidentally harvested in chum salmon-directed fisheries would reduce management flexibility.
- This proposal would close all commercial summer chum salmon fisheries once the quota was reached.
- It is unclear how this proposal would affect management of Tanana River. If the quota was achieved in lower river fisheries, Tanana River would then be closed to summer chum fisheries. The department uses inseason management information to manage Tanana River as a terminal fishery.
- In years when the summer chum run is strong, a large harvestable surplus could be foregone by establishing a quota.
- In years when the king salmon run is strong, the incidental harvest rate could be higher, thus reaching the quota quickly, and resulting in unnecessarily limiting commercial opportunity.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Would encourage fishing behavior during a chum fishery that avoids targeting king salmon.
- Suggested amendment to only take effect during times of king salmon subsistence restrictions.
- Suggested amendment to provide the department emergency order authority to restrict sales.

#### **Opposition:**

- Erroneous inseason project assessments resulted in loss of money to the commercial fishery.
- Fish that are already caught should be sold.
- May defeat conservation efforts.

Work group was established to come to consensus on proposals 91 and 92. Results provided under proposal 92.

**SSFP:** Not discussed.

# POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No action based on consensus to support Proposal 92.

PROPOSAL 93 – 5 AAC 05.360. Yukon River King Salmon Management Plan. Prohibit retention of king salmon during chum salmon-directed main stem fisheries.

Staff Reports: RC 4, Oral Tab 3, Written Tab 6 and 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 5, 10, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 51, 53, 57, 60, 63, 64, 67, 68, 71, 84, 87, 89.

## Narrative of Support and Opposition:

## Department:

• This proposal prohibiting retention would likely result in wastage of king salmon.

Department of Law: None.

Federal Subsistence Representative: None.

Support: None.

#### **Opposition:**

• Would cause king salmon to be wasted.

SSFP: Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: None.

Oppose: Tanana/Rampart/Manley.

Public Panel Recommendation: Consensus to Oppose.

Board Committee Recommendation: No action based on consensus to support Proposal 92.

PROPOSAL 94 – 5 AAC 05.360. Yukon River King Salmon Management Plan. Require windows schedule during lower river commercial fishery.

Staff Reports: RC 4, Oral Tab 3-6, Written Tab 6 and 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 3, 5, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 3, 4, 5, 7, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 27, 33, 38, 41, 44, 45, 51, 52, 53, 57, 59, 60, 63, 64, 67, 68, 71, 84, 87, 89, 91, 94.

## Narrative of Support and Opposition:

#### Department:

- This proposal would unnecessarily continue the windowed schedule throughout the fishing season, and would reduce management flexibility.
- This proposal would not allow for reductions in the subsistence fishing schedule in the event of a poor run.
- Current regulations allow subsistence fishing seven days per week in Koyukuk River and Subdistrict 5-D because these locations are less efficient at harvesting salmon.
- Subsistence fishermen would be forced to directly compete with the large commercial fishing fleet in the lower river districts.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Want windows to protect escapement and biological integrity of the run.
- Felt windows have resulted in improved escapement at the border.

## **Opposition:**

- Will potentially reduce subsistence fishing opportunity.
- Economic loss due to reduced commercial fishing opportunity.

Work group established to achieve consensus regarding proposals 88, 89, 90, and 94. There was wide support for closing all fishing on the first pulse of king salmon from the mouth to the Canadian border. However, no agreement on mesh size or depth or to have closures with additional restrictions was reached.

**SSFP:** Not discussed.

## POSITIONS AND RECOMMENDATIONS

ADF&G Position: Oppose.

AC Positions: Support: Fairbanks.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to support with substitute language.

Substitute Language:

5 AAC 05.360. Yukon River King Salmon Management Plan. Amend (h)

(h) If preseason or inseason run assessment information indicates insufficient abundance of king salmon to meet escapement objectives, the commissioner may, by emergency order, close all salmon fishing for up to ten consecutive days, in a district or portion of a district, to protect the king salmon run.

PROPOSAL 95 – 5 AAC 05.360. Yukon River King Salmon Management Plan. Reallocate commercial king salmon harvest.

Staff Reports: RC 4, Oral Tab 3, Written Tab 6.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 5, 7.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 4, 5, 10, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 46, 51, 53, 57, 59, 60, 63, 64, 65, 67, 68, 71, 74, 89, 91.

#### Narrative of Support and Opposition:

#### Department:

• During large runs, current fishing effort and processing capacity in upper river districts will not be able to harvest the surplus available.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Current upriver allocation is insufficient to maintain markets.
- Proposed harvest allocation would be more representative of the spawning stocks they originated from.
- Upper river felt underrepresented when allocations were first made.
- Fish lose weight in the upriver migration and greater harvest numbers are needed in the upper river to achieve the same amount of harvest by weight.
- Lower river fishermen have access to other fisheries that are unavailable to mid and upper river fishermen.

#### **Opposition:**

- Restructuring would result in the loss of harvest allocation to lower river.
- No correlation to the number of permits or effort.

SSFP: Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: Ruby

Eagle. Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

Substitute Language: None

#### PROPOSAL 96 – 5 AAC 05.362. Yukon River Summer Chum Salmon Management Plan.

Reallocate commercial summer chum salmon harvest.

Staff Reports: RC 4, Oral Tab 3, Written Tab 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 4, 5, 10, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 46, 51, 52, 53, 57, 59, 60, 63, 64, 65, 68, 71, 89, 91.

#### Narrative of Support and Opposition:

#### Department:

- There are allocative aspects to this proposal.
- Need to take market presence into account.
- District 6 summer chum escapement numbers would need to be evaluated.

Department of Law: None.

Federal Subsistence Representative: None.

#### **Support:**

- Current allocation is not fair and is skewed toward lower river districts.
- Proposed harvest allocation based on stock of origin.
- Current upriver allocation is insufficient to maintain markets.
- Reference support from Proposal 95.

#### **Opposition:**

- There are more fishermen on the lower river than the upper river.
- Currently the upriver guideline harvest range is not fully utilized.
- Would negatively impact lower river fishermen.
- Upper river districts lack commercial markets.
- Reference opposition from Proposal 95.

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: Tanana/Rampart/Manley.

Oppose: Middle Yukon.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

Substitute Language: None.

PROPOSAL 97 – 5 AAC 05.365. Yukon River fall chum salmon guideline harvest ranges. Reallocate commercial fall chum salmon harvest.

Staff Reports: RC 4, Oral Tab 3, Written Tab 8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 2, 4, 5, 10, 15, 18, 21.

Record Comments: RC 13, 14, 19, 20, 21, 26, 27, 33, 38, 41, 44, 45, 46, 51, 53, 57, 59, 60, 63, 64, 65, 67, 68, 71, 89, 91.

#### Narrative of Support and Opposition:

#### Department:

• There are allocative aspects to this proposal between fishing districts.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

- Current harvest allocation is felt to be unfair to upper river Districts 5 and 6.
- Reference support from Proposal 95.

#### **Opposition:**

- Would result in economic loss to lower river fall chum fishery.
- Reference opposition from Proposal 95.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: Tanana/Rampart/Manley.

Oppose: Middle Yukon.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: No consensus.

Substitute Language: None.

PROPOSAL 98 – 5 AAC 05.200. Fishing districts and subdistricts. Open commercial fishing between Black River and Chris Point.

Staff Reports: RC 4, Oral Tab 3, Written Tabs 6-8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 7, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 3, 15, 18, 21.

Record Comments: RC 20, 21, 26, 27, 51, 52, 68, 71.

#### Narrative of Support and Opposition:

#### Department:

• There are allocative aspects to this proposal between fishermen in District 1.

#### Department of Law:

• Mixed stock policy clarification.

Federal Subsistence Representative: None.

#### Support:

- Would increase the number of set gillnet sites available and reduce crowding.
- Increased fishing opportunity.

#### **Opposition:**

• Potential biological concerns about harvest on this mixed stock fishery.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Neutral on allocative aspects of this proposal.

AC Positions: Support: Lower Yukon.

Oppose: None.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

Substitute Language: None.

PROPOSAL 99 – 5 AAC 05.350(4). Closed Waters. Open Andreafsky River to commercial fishing.

Staff Reports: RC 4, Oral Tab 3, Written Tab 6 and 7.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 1, 2, 3, 4, 5, 8.

Timely Public Comment: RC 1, Public Comment Tab, PC 1, 4, 15, 18.

Record Comments: RC 13, 14, 20, 21, 27, 38, 51, 52, 57, 60, 67, 71.

#### Narrative of Support and Opposition:

#### Department:

- Specifically targeting Andreafsky River stocks might increase overall harvest pressure on that stock.
- Commercial fisheries operating in Districts 1 and 2 harvest a mix of stocks, including Andreafsky River stocks.

Department of Law: None.

Federal Subsistence Representative: Oppose.

#### **Support:**

- Can be managed as a terminal fishery using assessment information provided by the weir project.
- Would take pressure off mainstem fishery.

#### **Opposition:**

- Barely made escapement goals the last few years.
- Mouth of Andreafsky River serves as a resting area for salmon migrating farther up the mainstem Yukon River.
- Lower Yukon River fishermen prefer to keep the area closed.
- Area is small and cannot support intensive fishing effort; could damage habitat

**SSFP:** Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Oppose.

AC Positions: Support: Fairbanks.

Oppose: Lower Yukon.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to oppose.

Substitute Language: None.

**PROPOSAL 199 – 5 AAC 05.369. Yukon River Coho Salmon Management Plan.** Modify the Yukon River Coho Salmon Management Plan to provide for late season harvest as follows.

(i) Notwithstanding any other provision in this section, if the commissioner determines that there is a harvestable surplus of coho salmon above escapement needs and those necessary for subsistence uses, and that a directed coho salmon commercial fishery will not have a significant impact on escapement or allocation of fall chum salmon, the commissioner may, by emergency order, open a directed coho salmon commercial fishery under this section.

Staff Reports: RC 4, Oral Tab 3, Written Tab 8.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 3, 5.

Timely Public Comment: RC 1, Public Comment Tab, PC 8, 9.

Record Comments: RC 51.

#### **Narrative of Support and Opposition:**

#### Department:

• Adoption would continue to provide conservative management while adding management flexibility to allow limited commercial fishing directed at coho salmon after the majority of fall chum salmon have passed.

Department of Law: None.

Federal Subsistence Representative: Neutral; refer to PC 8.

#### Support:

- Allow potential commercial opportunity at lower threshold.
- Some separation of fall chum and coho salmon run timing at the mouth, which can possibly reduce incidental harvest of fall chum salmon.

#### **Opposition:**

- Limited assessment information.
- Fall chum and coho overlap in some upriver areas, especially Tanana River.

**SSFP:** Not discussed.

#### POSITIONS AND RECOMMENDATIONS

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: Fairbanks.

Public Panel Recommendation: No consensus.

Board Committee Recommendation: Consensus to support.

Substitute Language: None.

PROPOSAL 100 - 5 AAC 74.010. Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Close the Tok River drainage to sport fishing for salmon.

Staff Reports: RC 3, Written Tab 2.

Staff Comments: RC 2.

Deliberation Materials: None.

AC Reports: RC 1, Advisory Committee Comment Tab, AC 2, 3, 5, 6.

Timely Public Comment: RC 1, Public Comment Tab, PC 4, 15.

Record Comments: None.

#### Narrative of Support and Opposition:

#### Department:

- Would be consistent with regulations in other Tanana River tributaries (Delta River drainage, and portions of the upper Chatanika, Goodpaster, and Salcha rivers) to protect small salmon stocks.
- Since any other salmon stocks in the Tok River drainage are also likely to be small, the department is requesting that this apply to all salmon species.
- Limited harvest outside of personal use area or above Delta.
- The department currently utilizes discretionary permit authority to close the Tok River to subsistence salmon harvest.

Department of Law: None.

Federal Subsistence Representative: None.

#### Support:

• Support protecting genetic diversity for stock longevity.

Opposition: None.

SSFP: Not discussed.

#### **POSITIONS AND RECOMMENDATIONS**

ADF&G Position: Support.

AC Positions: Support: None.

Oppose: None.

Public Panel Recommendation: Consensus to Support.

Board Committee Recommendation: State position. Consensus to support.

Substitute Language: None.

### Representative Bob Herron

Rep.Bob.Herron@legis.state.ak.us

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State Capitol • Juneau, Alaska 99801-1182 Phone: (907) 465-4942 • Fax: (907) 465-4589

House District 38 Kuskokwim & Johnson Rivers Kuskokwim Bay & Nelson Island

Akiachak Akiak Atmautluak Bethel

Chefornak

Eek Goodnews Bay

Kasigluk Kipnuk Kongiganak Kwethluk

Kwathluk Kwigillingok Lower Kalskag Mekoryuk Mertarvik Napakiak Napaskiak

Newtok
Nightmute
Nunapitchuk
Oscarville
Platinum
Quinhagak

Quinhagak Toksook Bay Tuluksak Tununak

Tuntutuliak Upper Kalskag Submitted by Greg Rossicker

#### **Sponsor Statement**

#### House Bill 227: Holitna River Basin Hunting, Fishing & Trapping Reserve

This bill addresses several major areas of identified needs in protecting or furthering the management concepts embodied within the state's intensive management policies.

First, HB 227 establishes a burden of proof for legal challenges by animal welfare groups—legal challenges that may suspend or pre-empt active management programs designed to manage fish or game populations for human harvest benefit. It seeks to define legal avenues for process challenges in these designated areas by animal welfare entities that often emphasize political science over biological science within our state's management structure.

Second, although some limited active management programs have been implemented with the support of past gubernatorial administrations, this bill is intended to strengthen statutory, constitutional-related active management principles.

Third, the bill is specifically written to be compatible with other "Breadbasket" areas within the state's Intensive Management Areas which exemplify high quality habitat and productivity contributions to entire GMU sub-regions.

Finally, it intends to clearly establish the priority and primary management use of the area to protect the hunting, fishing & trapping activities for future generations. Frustration has been expressed throughout the state where it was thought these values were being protected through the creation of Refuges or Public Use Management Areas only to see these areas experience increasing restrictions, closures, or other actions such as banning of firearms.

This proposed reserve concept was initiated by the Sleetmute Traditional and Orutsararmiut Native Councils; has records of support from the Lower Kuskokwim, Central Kuskokwim, Stony/Holitna and Anchorage Fish & Game Advisory Committees, Kuskokwim Salmon Management Working Group, Association of Village Council Presidents and Calista Corporation; and has undergone legal review through the State Board of Game process, twice receiving their endorsement.

### HB #227 - Holitna Basin Hunting, Fishing and Trapping Reserve (HHFTR) Legislation Development Recap and Activity Summary

<u>January, 2006:</u> Proposal #45 to designate the Holitna drainage as a new Game Management Sub-unit (as 19E) deliberated at Board of Game (BOG) Statewide regulatory meeting. In response to an option suggested by Orutsararmiut Native Council in consultation with Sleetmute residents, to make the area a game reserve, the BOG incorporated this concept; and reissued as new proposal #158, to be published for further public review, comment, and deliberation at the Region III regulatory meeting in March.

March, 2006: Board of Game action passes the proposal with records of support from AVCP, Lower Kuskokwim, Central Kuskokwim, and Anchorage Fish & Game Advisory Committees. Makes title change from "Game Reserve" to "Hunting and Trapping Reserve". Requested sponsors to further develop draft legislative language in consultation with Division of Wildlife Conservation (DWC) & BOG Dept. of Law (DOL) representatives.

<u>April, 2006:</u> Companion proposal #157 submitted (per proposal cycle deadline) to Board of Fisheries (BOF) by Sleetmute Traditional Council and Orutsararmiut Native Council to add fisheries component.

August, 2006: Draft language for Holitna Reserve sent to DWC & BOG-DOL for review and comment.

- Representative Kapsner/Nelson & Senator Hoffman agree to support legislation when language ready.

September, 2006: BOF proposal #157 supported/endorsed by Kuskokwim Salmon Mgmt. Working Group.

October, 2006: DNR issues Final Best Interest Finding that denies coal bed methane exploration permits in the Holitna Basin after two year review period stating "... the possible adverse impact to the high fish & wildlife values and related human uses are too great to be mitigated with the project as proposed..."

- Support resolution (#06-10-04) passes unanimous at annual AVCP Convention
- BOG formally receives/reviews draft language at special regulatory meeting in Anchorage and reaffirms support of proposed legislative effort. Requests sponsors to continue working with DWC and BOG-DOL to further refine statutory language prior to legislative introduction.

November, 2006: Calista Corporation provides letter of support for draft language as currently written.

<u>December</u>, 2006: Lower & Central Kuskokwim Advisory Committees reaffirm support. Draft language sent to legislative counsel for bill formatting by Representative Nelson.

January, 2007: Draft bill re-circulated for additional review and comment from DWC, BOG-DOL, BOF and public.

**February, 2007:** Board of Fish tables proposal (#157) to their October, 2007 work session and refers to a Habitat Committee created from Bristol Bay area proposal #121, addressing Tularik Creek Refuge/Reserve (connected to Pebble Mine development project).

- BOG Chair provides final comments on draft language from BOG-DOL to sponsors and offers open invitation for additional BOG support if needed.
- Final BOG/legal comments incorporated into draft bill and presented to Representative Nelson for introduction.

March, 2007: Notified by Representative Nelson that due to legislative protocol she should not be the primary bill sponsor. Though the area is part of her constituents Customary & Traditional hunting area, it is not physically within her voting district. All information to date forwarded to Rep Woody Salmon's office and Rep. Nelson remains committed to work as co-sponsor in helping with its passage. Efforts to solicit support and introduction from Rep. Salmon produce no response. Due to these conditions, along with related (though unbefitting) baggage of pending ballot initiatives, Sleetmute/ONC sponsors confer and agree to hold off introduction until a later date.

October, 2007: BOF takes no further action on proposal as agenda item at fall work session, though noting it remains a "live" issue, with any further action pending bill introduction and recommendation from their habitat committee.

<u>February/March, 2009:</u> Discussions reinitiated with (new) Rep. Herron who stated willingness to pursue introduction and support for HHFTR intent and passage. Activity update to Board of Game spring meeting.

April, 2009: Rep. Herron reports discussion w/ Rep. Salmon who stated no problem w/ Herron as primary sponsor. HB #227 filed w/ intent that refinement, co-sponsor & other support work be pursued for action in 2010 session.

<u>August, 2009:</u> Meeting with co-sponsor, Rep Herron, legislative staffers & state DOL/ADFG rep's to discuss and identify potential problem areas for amendment. Initial substitute language drafted and circulated for further review.

Sept./October, 2009: Update meetings w/ Sleetmute/Napaimute Traditional Councils, Calista Corp & AVCP;

- Schedule for support action thru BOF work session at Habitat Committee & January 2010 BOF-AYK meeting;
- Current language presented at special hearing of House Resource Committee in Bethel (by request/invitation).

November, 2009: Consultation w/ Dept. of Natural Resources director & staff for further review and recommendations on draft language.

26-LS0822\N Kane 12/30/09

#### SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 227

IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-SIXTH LEGISLATURE - SECOND SESSION

BY REPRESENTATIVE HERRON

Introduced: Referred:

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#### A BILL

#### FOR AN ACT ENTITLED

1	"An Act relating to the establishment of state fish and game reserves; creating the
2	Holitna River Basin Hunting, Fishing, and Trapping Reserve; and providing for an
3	effective date."

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

\* Section 1. AS 16.20 is amended by adding new sections to read:

#### Article 6. Fish and Game Reserves.

Sec. 16.20.700. Purpose. The purpose of establishing a fish and game reserve is to promote management activities to rebuild or enhance fish and wildlife populations and habitats to maintain historical and sustainable harvest levels for continued high levels of human consumptive use of these resources.

Sec. 16.20.710. Regulations. The Board of Fisheries or the Board of Game, where appropriate, shall adopt regulations each considers advisable for conservation and protection of fish and game to carry out the purposes of AS 16.20.700 and 16.20.720.

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Sec. 16.20.720. Holitna River Basin Hunting, Fishing, and Trapping Reserve established. (a) All state-owned land and water and all land acquired in the future by the state within the watershed of the Holitna River and Hoholitna River is designated as the Holitna River Basin Hunting, Fishing, and Trapping Reserve.

- (b) The Holitna River Basin Hunting, Fishing, and Trapping Reserve is established to
- (1) ensure management and protection of fish and wildlife populations and habitat to perpetuate subsistence use, commercial use, and other consumptive uses of the area's fish and wildlife;
- (2) implement maximum use and benefit, sustained yield, and common use principles by using effective management techniques for conserving and developing the area's fish and wildlife resources to regain or maintain historical harvest levels with human consumptive use of these resources as a priority;
- (3) maintain and enhance healthy and abundant fish and wildlife populations commonly used for consumption by humans to provide high levels of human consumptive use in keeping with amounts determined by the Board of Fisheries and the Board of Game to be reasonably necessary to provide for subsistence uses and with other population and use goals or objectives set by the appropriate board;
- (4) allow for long-term scientific research and management study areas to determine the effectiveness of management activities under this section in providing for current and future human harvest needs.
- (c) To fulfill the purposes of this section, the Department of Fish and Game, the Board of Fisheries, and the Board of Game shall manage the fish and game resources of the area to provide for high levels of human harvest and, subject to priorities among areas in which intensive management actions are carried out as determined by the Department of Fish and Game, the Board of Fisheries, and the Board of Game, shall
- (1) control predation and adjust predator and prey population ratios through whatever methods or means are considered appropriate to particular circumstances;

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- (2) conduct management actions designed to further the purposes of this section so long as the appropriate board has not found, based on substantial evidence, that the challenged management actions are counterproductive or ineffective in maintaining or enhancing healthy and abundant fish or wildlife populations commonly used for consumption by humans for food to provide for high levels of human consumptive use;
- (3) consider scientific evidence augmented by historical and local environmental knowledge when evaluating management activities.
- (d) The Department of Natural Resources may not acquire by eminent domain privately owned land within the Holitna River Basin Hunting, Fishing, and Trapping Reserve but may acquire privately owned land by purchase, exchange, or other means for inclusion in the reserve.
- (e) Public access to the Holitna River Basin Hunting, Fishing, and Trapping Reserve by boat, aircraft, dog team, snow machine, all-terrain vehicle, or other means consistent with the purposes of this section may be regulated by the Department of Natural Resources, in consultation with the Department of Fish and Game, as necessary to meet the purposes of this section and to protect access to and development of other natural resources within the reserve.
- (f) Access to and from private property within the Holitna River Basin Hunting, Fishing, and Trapping Reserve shall be guaranteed through access corridors established by the Department of Natural Resources, in consultation with the Department of Fish and Game and a private property owner.
- (g) Entry upon the Holitna River Basin Hunting, Fishing, and Trapping Reserve for purposes of exploration and development of nonrenewable resources is subject to approval by the Department of Natural Resources, in consultation with the Department of Fish and Game. Exploration and development activities must be conducted in a manner that is compatible with the purpose of this section.
- (h) Except as otherwise provided in this section, the Department of Fish and Game and the Department of Natural Resources shall exercise each department's respective authority over the Holitna River Basin Hunting, Fishing, and Trapping Reserve through a fish and game management plan prepared by the Department of

26-LS0822\N

Fish and Game in consultation with the Department of Natural Resources.

\* Sec. 2. This Act takes effect immediately under AS 01.10.070(c).

SSHB 227

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#### Sectional Analysis Holitna River Reserve SSHB 227 – Version K

#### Section 16.20.700. Purpose

States that the purpose of establishing a fish and game reserve is to promote sustainable levels of human consumption of fish and game.

#### Section 16.20.710. Regulations

Gives authority to the Board of Game or Board of Fish (whichever is more appropriate) to adopt regulations designed to conserve fish and game; and to carry out the purpose as set forth in sections 16.20.700 and 16.20.720.

#### Section 16.20.720 (a)

All present and future state-owned land and water within the Holitna and Hoholitna River watersheds is designated as part of the Reserve.

#### Section 16.20.720 (b)

The Reserve is established to ensure:

- 1. Management and protection of fish and game populations and habitat to perpetuate subsistence use, commercial use, and other consumptive uses;
- 2. Management techniques that promote maximum use with sustained yield to maintain historical harvest levels with human consumptive use as a priority;
- 3. Maintenance of fish and game populations to provide for high levels of human consumptive use (within limits set by Fish and Game Boards);
- 4. Allowance for scientific research elucidating the effectiveness of management activities in this section in providing for current and future human harvest needs.

#### Section 16.20.720 (c)

The Department of Fish and Game, the Board of Fisheries and the Board of Game shall manage fish and game resources within the Reserve to provide for high levels of human harvest and, subject to priorities among intensively managed areas for which these entities set policy, shall:

- 1. Control predation and adjust predator and prey population ratios thru appropriate means;
- 2. Conduct management actions designed to further the purposes of this section so long as the appropriate board has not found such actions to be ineffective at maintaining fish and game populations commonly harvested for food by humans;
- 3. Consider scientific evidence augmented by local environmental knowledge when evaluating management activities.

#### Section 16.20.720 (d)

The Department of Natural Resources may acquire privately owned land within the Reserve by purchase or exchange, but not thru eminent domain.

#### Section 16.20.720 (e)

Public access to the Reserve may be regulated by DNR, in consultation with DFG, as necessary to meet the purposes of this section and to protect access to, and development of, other resources within the Reserve.

#### Section 16.20.720 (f)

Access corridors established by DNR, in consultation with DFG and a private property owner, shall guarantee access to and from private property within the Reserve.

#### Section 16.20.720 (g)

Entry into the Reserve to explore or develop nonrenewable resources must be approved by DNR, in consultation with DFG, and such activities must be compatible with the purpose of this section.

#### Section 16.20.720 (h)

Except as otherwise provided in this section, DFG and DNR shall exercise their respective authority over the Reserve thru a management plan prepared by DFG in consultation with DNR.

#### Section 16.20.720 (i)

Reserve boundaries are defined as including all the sections (listed beneath their respective township and range designations) on the last eight pages of this bill.

## A review of size trends among North Pacific salmon (*Oncorhynchus* spp.)

Brian S. Bigler, David W. Welch, and John H. Helle

Abstract: The abundance of North Pacific salmon (*Oncorhynchus* spp.) has nearly doubled during the period 1975–1993. As salmon population numbers have increased, there have been corresponding decreases in average adult size at return (maturity). As nearly all of the growth of Pacific salmon occurs in the ocean, the ocean plays an important role in determining salmon abundance. We found that 45 of 47 North Pacific salmon populations, comprising five species from North America and Asia, are decreasing in average body size. Total salmon production correlated well with environmental trends between 1925 and 1989, but the inverse relationship between population abundance and average size during the period 1975–1993 indicates that there is a limitation to the salmon-sustaining resources of the ocean. The increased ocean survivorship and expansion of enhancement programs in the 1980s and early 1990s are probable factors in the ocean-wide reduced size of salmon. If these trends continue, the productivity of salmon populations may decrease as fecundity, egg size, and age at maturity change in response.

Résumé: L'abondance des saumons du Pacifique nord (*Oncorhynchus* spp.) a presque doublé au cours de la période de 1975 à 1993. À mesure que la population de saumons a croissé, on a noté une diminution correspondante de la taille moyenne des adultes lors de la remonte (à maturité). Comme presque toute la période de croissance des saumons se déroule dans l'océan, ce dernier joue un rôle important dans l'abondance de ces poissons. Nous avons constaté une diminution de la taille corporelle moyenne chez 45 des 47 populations de ces saumons, qui comprennent cinq espèces de l'Amérique du Nord et de l'Asie. La production totale de saumons était assez bien corrélée avec les tendances environnementales de 1925 à 1989, mais la relation inverse entre l'abondance de la population et la taille moyenne observée de 1975 à 1993 indique l'existence d'une limitation des ressources de l'océan supportant le saumon. Le taux de survie accru dans l'océan et l'élargissement des programmes de mise en valeur au cours des années 1980 et au début des années 1990 sont des facteurs probables de la réduction de la taille du saumon observée dans toutes les parties de l'océan. Si ces tendances persistent, la productivité des populations de saumons pourrait diminuer en réponse aux changements de la fécondité, de la taille des oeufs et de l'âge du poisson à maturité.

[Traduit par la Rédaction]

#### Introduction

Advances in population management, artificial enhancement, and favorable ocean conditions have more than doubled the population of salmon (*Oncorhynchus* spp.) in the North Pacific Ocean over the past 20 years (Rogers 1994) (Fig. 1). There is a growing body of evidence, however, that some North Pacific salmon populations have decreased in average size at maturity as ocean abundance has increased.

Studies of reduced growth among Pacific salmon have been relatively few and limited to individual spawning populations or species. Kaeriyama (1989, 1996), Kaeriyama and Urawa (1992), Ishida et al. (1993), and Hayashizaki and Hitoshi (1996) have documented decreases in the average size of Asian chum salmon (*Oncorhynchus keta*) in recent years. Similarly, Helle and Hoffman (1995) have documented age-

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**B.S. Bigler.** Wards Cove Packing Company, P.O. Box C-5030, Seattle, WA 98105, U.S.A.

**D.W. Welch.** Pacific Biological Station, Nanaimo, BC V9R 5K6, Canada.

**J.H. Helle.** Auke Bay Laboratory, U.S. National Marine Fisheries Service, 11 305 Glacier Highway, Juneau, AL 99801-8626, U.S.A.

specific declines in the average size of two North American chum salmon populations.

Because the ocean distributions of Pacific salmon populations overlap (Myers et al. 1990), significant trophic interaction among, and within, species could result in the expression of density-dependent growth if food is limiting. Some evidence exists for an inverse relationship between the growth of sockeye salmon (Oncorhynchus nerka) and the ocean abundance of that species (Rogers 1980; Peterman 1984). Similar findings have been reported for pink salmon (Oncorhynchus gorbuscha) (Foerster and Pritchard 1941; Davidson and Vaughan 1941; Ricker et al. 1978), coho salmon (Oncorhynchus kisutch) (Ricker and Wickett 1980; van den Berghe and Gross 1989), and chinook salmon (Oncorhynchus tshawytscha) (Ricker 1980, 1981). At least two hypotheses have been advanced that can explain declining body size: densitydependent growth, and selection of larger, older fish by selective fisheries.

While various authors have reported evidence that salmon size has decreased in the recent past, there is evidence of both increasing and decreasing average body size over longer periods. The age-specific size at maturity of chum salmon declined slightly from 1959 to 1978 in Prince William Sound, Alaska (Helle 1979). Godfrey (1959a) found that the average weight of British Columbia pink salmon increased from 1944 through 1958, and there was a similar increase in the average weight

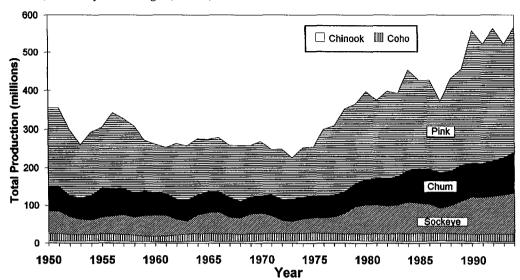


Fig. 1. Total North Pacific Ocean salmon production, 1951–1994. Data from D. Rogers, Fisheries Research Institute, University of Washington, Seattle, WA 98195.

of chum salmon from 1946 through 1958 (Godfrey 1959b). Conversely, Ricker et al. (1978) found that the average size of British Columbia pink salmon decreased subsequent to the period reported by Godfrey (1951–1974). Ricker (1981) reported coincident changes in age and decreasing size among all Pacific salmon species intercepted in the commercial fisheries of British Columbia since the early 1950s, but found differing results in a subsequent study (Ricker 1994).

As growth rates decrease, many life history traits that affect population productivity also decrease (Forbes and Peterman 1994). Reduction in fecundity and egg size, increases in mean age at reproduction, or the ability to migrate upstream and spawn with optimal success all influence population productivity and therefore harvest rates. Helle (1989), for example, found that the mean size (length) of chum salmon spawners is positively related to the survival of their progeny. If this relationship applies more generally, declines in size could reduce survival. We present a survey of reported associations between growth rate and other density-related population responses in Pacific salmon. We also examine temporal trends in size and age and review data on fecundity and egg size.

#### **Materials and methods**

A variety of state, provincial, and federal governmental agencies in North America provided average weight and other data for five Pacific salmon species to test for trends in average size (Fig. 2). Additional summary data were available from published reports (Ishida et al. 1993; Welch and Noakes 1993). Pacific salmon abundance nearly doubled in the period 1975–1993 compared with that in the period 1950–1975 (Fig. 1). Analyses are confined to data characterizing the years 1975–1993.

Several authors reporting on temporal changes in body size favor linear regression analysis (e.g., Ricker 1981; Kaeriyama 1989; Ishida et al. 1993). Fundamental to the generation of unbiased regression statistics is the assumption that error terms are random. Because salmon return to spawning rivers after 1 to several years at sea, those harvested in nearshore fisheries comprise portions of brood cohorts resulting from several spawning seasons. Though not true in every

case, it is not unusual for the year to year average size of salmon to follow cyclical, nonrandom patterns over time. Data that follow such patterns are often autocorrelated and do not always fit a linear regression model without inefficient estimation of slope and underestimation of slope standard error (J. Pella, National Marine Fisheries Service, 11 305 Glacier Highway, Juneau, AL 99801, personal communication). As a result, the risk of rejecting the null hypothesis (that slope is zero) is higher. The simple linear regression model with the random error terms following an autoregressive process is  $Y_t = \beta_0 + \beta_1 X_t + \varepsilon_t$ , where  $\varepsilon_t = \rho \varepsilon_{t-1} + u_t$ . Each error term  $\varepsilon_t$  in this model consists of a fraction of the previous error term  $\rho \varepsilon_{t-1}$  plus a disturbance term  $u_t$ .

Autocorrelation was tested following the procedure of Neter et al. (1985) to calculate unbiased regression statistics. The slope of generated regressions, expressed as b throughout this document, is the calculated average annual change in the variable tested.

#### Data sources

Size-at-return data (weight or length) are based on summaries of commercial harvest information collected by state and federal government agencies, and data summaries from the Pacific Biological Station, Nanaimo, British Columbia (Welch and Noakes 1993), and the University of Washington (Rogers 1994). Chum salmon fecundity and egg size data were supplied by state and private hatcheries in Oregon and Alaska. Other unique data sources are identified when referenced. Where possible, data from less selective fishing gear (seine, troll) were used.

The Pacific Fishery Management Council Review of Fisheries summarizes data on dressed weight of troll-caught chinook and coho in the states of California, Oregon, and Washington (Rod Kaiser, Oregon Department of Fish and Wildlife, 2040 Southeast Marine Science Drive, Newport, OR 97365, personal communication). California, Oregon, and Washington troll fishery data for the month of August were selected for analysis because chinook average weights were highest during August, indicating that mature salmon comprised the highest proportion of the catch, and because data are available for all years.

The Oregon Department of Fish and Wildlife (ODFW) provided data on average size at return, fecundity, and egg size for Columbia River salmon returning to hatcheries (John Leppink, Hatchery Data

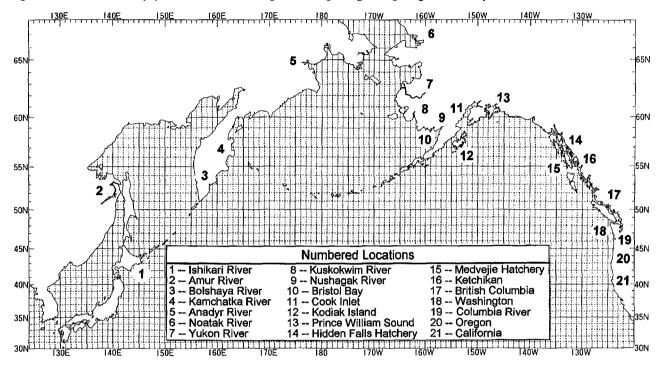


Fig. 2. Locations of salmon populations tested for changes in average weight, length, age, or ancillary information.

Coordinator, ODFW, P.O. Box 59, Portland, OR 97207, personal communication). The average sizes of salmon in Columbia River commercial harvests were taken from published data (Oregon Department of Fish and Wildlife 1993).

Welch and Noakes (1993) reported average size data for all salmon species in British Columbia. Ricker (1994) reported a comprehensive analysis of these data.

The Alaska Department of Fish and Game provided average weight data for each species harvested in the following nearshore commercial fisheries: Kotzebue Sound, Yukon River, Kuskokwim River, Bristol Bay, Kodiak Island, Cook Inlet, and Ketchikan (Herman Savikko, Alaska Department of Fish and Game, P.O. Box 25526, Juneau, AL 99802-5526, personal communication).

Several hatcheries in Alaska provided average size, fecundity, and egg size data (Steve McGee, Alaska Department of Fish and Game, P.O. Box 25526, Juneau, AL 99802-5526, personal communication; Bruce Bachen, Northern Southeast Regional Aquaculture Association, 1308 Sawmill Creek Road, Sitka, AL 99835, personal communication; Peter Rob, Sikusuilaq Springs Hatchery, P.O. Box 1030, Kotzebue, AL 99752, personal communication). Sikusuilaq Springs Hatchery on the Noatak River in northwest Alaska has produced fall chum salmon since 1982. Hidden Falls and Medvejie hatcheries in southeast Alaska provided fecundity data collected since 1986 and 1988, respectively. The Port San Juan Hatchery in Prince William Sound, Alaska, provided 14 years of average fecundity information.

Decreases in average size for chum salmon populations can be confounded by variability in age at return. An increasing number of older, larger fish (Helle and Hoffman 1995) will tend to mask the overall decrease in average body size. Age-specific size data covering the period under review are not generally available. Pink salmon return at 2 years of age and coho salmon generally return at age 3; however, there is probably little likelihood that variation in age at return will be confounded with variation in growth rate because these species always spend only one summer (two winters) at sea. Chinook, sockeye, and chum salmon return to natal streams following one to several winters at sea. There are sufficient data to examine changes in age-specific growth rates for chinook from the Yukon, Kuskokwim,

and Kenai rivers, Yukon River fall and summer chum, and Bristol Bay and Kenai River sockeye.

A decrease in average body size results in a smaller volume and decreasing fecundity (Bagenal 1969; Beacham and Murray 1987; Helle 1989; Fleming and Gross 1990). Although a direct relation with body size (weight) is assumed, fecundity and egg size are not regularly measured for wild salmon populations in western Alaska. Data from Columbia River coho, Sikusuilaq Springs (Noatak River; Kotzebue, Alaska) chum and Hidden Falls and Medvejie (southeast Alaska) chum, and Prince William Sound pink salmon hatchery populations are available (Fig. 2).

#### Results

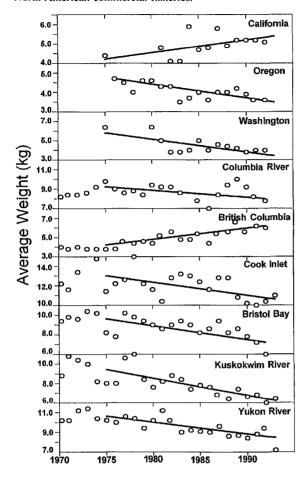
Among five species of Pacific salmon, 45 of 47 populations tested decreased in mean size between 1975 and 1993 (Table 1, Figs. 3–7). Only California and British Columbia chinook salmon failed to show an inverse association between size and time.

#### Chinook salmon

Chinook salmon migrate to sea after spending up to two winters in fresh water; they then return to spawn zero to five winters later. Among nine populations of chinook salmon tested, the calculated average weights of chinook in California and British Columbia increased 25 and 45%, respectively, between 1975 and 1993 (Table 1, Fig. 3). Body size decreased in all other populations tested, from 10 to 47%. The decline in body weight was least for Oregon chinook (0.047 kg/year) and greatest for Kuskokwim River chinook (0.162 kg/year) (Table 1).

Age-specific length data collected with the Yukon River commercial fisheries and Kenai River sport fishery corroborate

Fig. 3. Mean weight of chinook salmon sampled from nine North American commercial fisheries.



these findings (Table 2, Fig. 8). All age groups tested decreased by approximately 3-5% of body length.

The mean age at return of Kuskokwim River chinook salmon decreased over the period 1975–1993, while the age of Yukon River chinook remained essentially unchanged and Kenai River chinook increased in mean age over the period examined (Table 2, Fig. 8).

#### Coho salmon

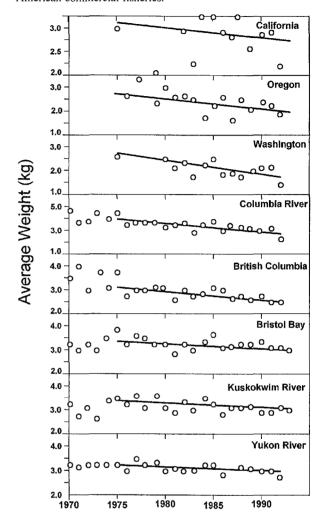
The majority of coho salmon are captured during their third or fourth year of life after spending two winters, or one summer, at sea. All populations tested showed decreased average body weight ranging from -0.012 to -0.059 kg/year (Table 1, Fig. 4).

#### Chum salmon

Chum salmon characteristically migrate to sea soon after fry emergence, and return from two to five winters later. Chum salmon among the 10 populations examined declined in average weight from 0.003 kg/year for Yukon River summer chum to 0.075 kg/year for Columbia River chum (Table 1, Fig. 5).

Age-specific data for Yukon River fall and summer chum show that as average size at age decreased, the mean age at return increased. The average lengths of each age group of

Fig. 4. Mean weight of coho salmon sampled from eight North American commercial fisheries.



summer and fall chum decreased similarly, at rates of 2–4% over 1975–1993 (Table 3, Fig. 9). Summer chum age increased from 3.0 to 3.8 years, while fall chum increased from 2.9 to 3.4 years.

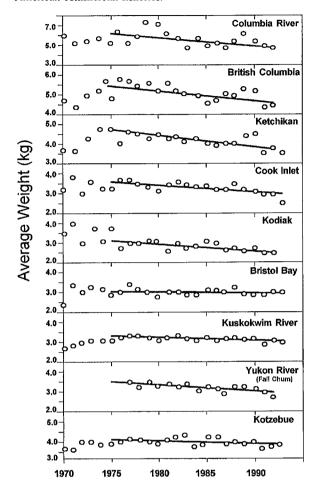
#### Pink salmon

Pink salmon follow a 2-year life cycle, spending one winter at sea. The average weights of North American pink salmon populations have decreased at a relatively uniform rate of approximately 0.020 kg/year, or about 20% from 1975 to 1993 (Table 1, Fig. 6). The decline is most notable in British Columbia where the declining trend has continued since the early 1950s (Ricker et al. 1978); currently British Columbia pink salmon are approximately 1 kg (40%) smaller than in the 1950s (Ricker 1994).

#### Sockeye salmon

The sockeye salmon life history is very plastic, with fish spending from zero to three winters in fresh water and one to four winters at sea. Though regression slopes are uniformly negative, only two of five sockeye salmon populations tested

**Fig. 5.** Mean weight of chum salmon sampled from nine North American commercial fisheries.



showed statistically significant (P < 0.05) declines (Table 1, Fig. 7). Sockeye salmon harvested from Kodiak Island and Cook Inlet decreased by 0.027 kg/year (16.8 and 11.5%, respectively) from 1975 to 1993.

Age-specific length measurements for sockeye salmon caught in the Cook Inlet and Bristol Bay gill-net fisheries show similar tendencies in declining length and weight, respectively (Table 4, Fig. 10). The average ocean age of these sockeye salmon gradually increased as growth rates declined and a smaller proportion of young fish returned with time (Table 4).

#### Fecundity and egg size

Fecundity and egg size data collected from hatchery populations are well suited for basic comparison with wild salmon stocks. Fecundity declined among all hatchery populations tested (Fig. 11). The egg sizes of coho salmon and fall and summer chum showed a significant decrease with decreasing fecundity (Fig. 12).

#### **Discussion**

Maximization of natural production and advances in artificial enhancement techniques have assisted in the near doubling of salmon harvests over the past two decades. As North Pacific

Fig. 6. Mean weight of pink salmon sampled from six North American commercial fisheries.

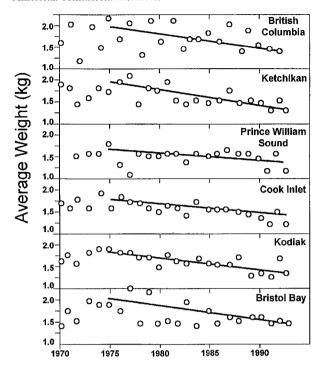
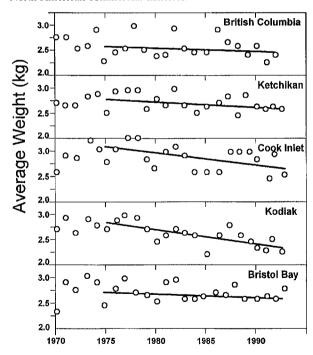


Fig. 7. Mean weight of sockeye salmon sampled from five North American commercial fisheries.



salmon population numbers have expanded, there has been a coincident decrease in average adult size and an increase in average age at maturity.

The changes in both average size and age for western

Table 2. Trends in age-specific mean length (mm) and average age (years) of selected North Pacific chinook salmon populations.

					C	alculated valu	es	
Population	Age group	n	r	b	1975	1979	1993	% change
			]	Length				
Yukon River	3-ocean	14	-0.658*	-2.16		789.9	759.7	-3.82
	4-ocean	14	-0.485	-1.74		885.0	860.7	-2.75
	5-ocean	13	-0.508	-4.11		965.5	912.1	-5.53
Kenai River	3-ocean	17	-0.444	-4.25	905.0		828.5	-8.50
	4-ocean	17	-0.742**	-6.52	1102.5		985.0	-10.70
	5-ocean	17	-0.545*	-5.88	1169.4		1063.6	-9.00
				Age				
Yukon River	Ocean age	19	0.078	0.002	3.69		3.77	2.17
Kuskokwim River	Ocean age	19	-0.821**	-0.049	3.64		2.76	-24.18
Kenai River	Ocean age	16	-0.731**	-0.039	3.30		4.00	20.90

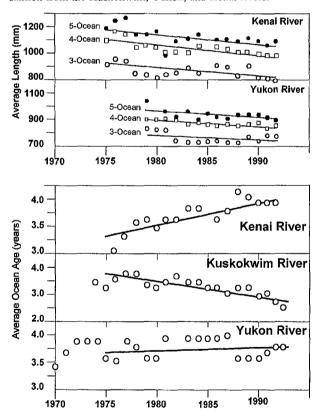
**Note**: n, number of years considered; r, correlation coefficient; b, regression slope (average annual change in weight). The calculated values (lengths for the length section of the table, and ages for the age section of the table) were computed from available data.

\*P < 0.05.

Alaska chum salmon mirror those for Japanese and Russian stocks reported by Ishida et al. (1993), and for two other North American populations reported by Helle and Hoffman (1995). Ishida et al. (1993) observed a depressed growth rate during the third year of life among both Japanese and Russian chum salmon and concluded that density-dependent factors explained 35% of the resultant decrease in average size. The remaining 65% was attributable to other factors, including artificial enhancement and interactions with other salmon species. Helle (1979) showed that reduced growth of Prince William Sound chum salmon during the second year at sea delayed the onset of maturity. Chum experience reduced food availability during periods of large population numbers, and reduced growth delays the onset of sexual maturation. Although pink salmon have maintained a fixed 2-year age at return, the declines in mean size have been even larger than for chum salmon. Similar changes are evident for other salmon species, although the evidence for widespread declines in growth rate is not as consistent as for pink and chum salmon. Sockeye salmon sampled from two locations in Alaska also exhibited an increase in average ocean age as average size decreased. The results for the average age of chinook salmon examined here are ambiguous. The mean age of Kuskokwim River chinook has decreased, the age of Yukon River chinook has been relatively unchanged, and Kenai River chinook have increased in age over the period examined. Reduction in average age coincident with average weight of British Columbia chinook was also reported by Ricker (1981) and is probably a result of differential exposure to mortality during the ocean residence. Comprehensive estimates of chinook salmon bycatch by vessels operating in both Alaskan and Russian waters of the Bering Sea are not available. Within the U.S. Exclusive Economic Zone in the Bering Sea the annual interception of chinook salmon is approximately 50 000 fish/year (G. Trumble, National Marine Fisheries Service, Juneau, AL 99801, personal communication). This level of removal is probably too small to influence estimates of average size or age.

Each of the above cases of decreasing size with time may be the result of increasing salmon abundance causing a reduction in the available food supply through density-dependent interaction and retarding size and age. Brodeur (1990) found

Fig. 8. Change in average length and age among chinook salmon from the Kuskokwim, Yukon, and Kenai rivers.



significant dietary overlap between chinook, coho, pink, and sockeye salmon, and that these species appear to feed opportunistically on a broad range of prey organisms. Chum salmon appear to be the most specialized and select food items not commonly shared with other species. Ricker (1981), on the other hand, attributed the decline in growth of British Columbia salmon to size-selective fisheries acting to select against rapid growth and discounted the possibility of environmental or density-dependent factors playing a major role. The use of

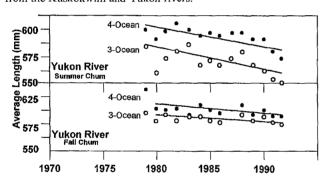
<sup>\*\*</sup>P < 0.01.

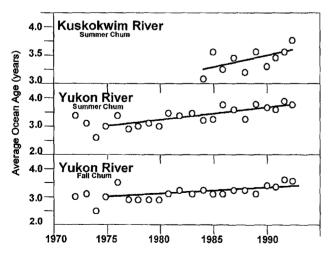
Table 3. Trends in age-specific mean length (mm) and average age (years) of selected North Pacific chum salmon populations.

						Calculated val	ues	
Population	Age group	n	r	b	1975	1979	1993	% change
			Length					
Yukon River (summer)	0.3	14	-0.587*	-1.19		580.4	563.7	-2.88
	0.4	14	-0.782**	-1.82		605.1	579.6	-4.21
Yukon River (fall)	0.3	13	-0.534*	-0.71		598.1	588.1	-1.67
	0.4	13	-0.704**	-1.18		619.1	602.6	-2.67
			Age					
Yukon River (summer)	Ocean age	19	0.805**	0.041	3.03		3.77	18.36
Yukon River (fall)	Ocean age	19	0.629**	0.028	2.92		3.42	12.76
Kuskokwim River (summer)	Ocean age	10	0.453	0.033	nc		nc	nc
Anadyr River	Ocean age	11	0.265	0.014	3.16		3.41	6.01
Kamchatka River	Ocean age	16	0.665**	0.025	3.15		3.60	10.84
Bolshaya River	Ocean age	15	0.611*	0.039	2.96		3.66	17.68
Amur River (summer)	Ocean age	16	0.817**	0.027	2.80		3.28	12.63
Amur River (fall)	Ocean age	18	0.823**	0.024	2.80		3.23	11.32
Ishikari Rivera	Ocean age	16	0.574*	0.028	2.31		2.82	15.41

**Note**: *n*, number of years considered; *r*, correlation coefficient; *b*, regression slope (average annual change in weight); nc, not calculated. The calculated values (lengths for the length section of the table, and ages for the age section of the table) were computed from available data. Data for the Anadyr, Kamchatka, Boshaya, Amur, and Ishikari rivers are from Ishida et al. (1993).

Fig. 9. Change in average length and age among chum salmon from the Kuskokwim and Yukon rivers.





selective gear types in nearshore harvests may contribute to the reduced average size of salmon through a genetic response, but it is highly unlikely that commercial fishing pressures throughout the North Pacific species range are acting simultaneously to account for the decreasing size among all species. Another possibility is that the increases in salmon abundance over the last two decades could be the result of reduced mortality on slower growing members of a cohort; in this case, changes in survival act to increase the proportion of small, slow-growing fish contributing to the fishery, thereby lowering the average size at age, even if growth rates do not change.

#### **Environmental influences**

Changes in population parameters that are coincident on an oceanwide scale are probably caused by common events during the ocean phase. Beamish and Bouillon (1993) found that long-term changes in the intensity of the Aleutian low pressure system, a weather system extending throughout the southern Bering Sea and North Pacific Ocean, correlate well with fluctuations in salmon abundance and the production of copepods. The inverse relationship between population abundance and average body size during the same period, however, suggests that there may be a limitation to the salmon-sustaining resources of the ocean.

#### Implications of reduced body size

Reduction in body size may result in reduced reproductive success (Helle 1989; review by Forbes and Peterman 1994). Life history theory predicts that large body size is a premium among salmon populations that migrate over long distances to spawn and enter the ocean as smolt. Beacham et al. (1988) and Beacham and Murray (1987) conclude that salmon body shape is heavily influenced by local selective forces in large and small rivers. Chum salmon spawning in large rivers in British Columbia adapt larger heads, thicker caudal peduncles, and larger fins than those spawning in smaller rivers. Healey and Heard (1984) found that egg numbers and adult body length are positively correlated in chinook. They concluded that there is substantial variation in fecundity between populations as an

<sup>\*</sup>*P* < 0.05. \*\**P* < 0.01.

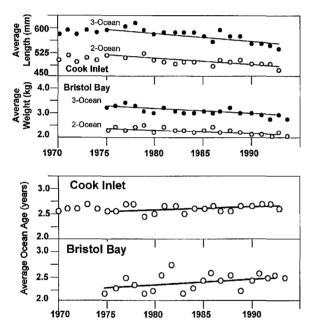
Table 4. Trends in age-specific mean length (mm), weight (kg), and average age (years) of selected North Pacific sockeye salmon populations.

				_	Calculat	ed values	
Population	Age group	n	r	b	1975	1993	% change
1.2.10.20			Weigl	nt			
Bristol Bay	2-ocean	20	-0.671**	-0.013	2.41	2.18	-23.00
•	3-ocean	20	-0.663**	0.018	3.25	2.94	-31.60
			Lengt	h			
Cook Inlet	2-ocean	17	-0.675**	-1.85	522.0	488.7	-6.38
	3-ocean	17	-0.780**	-2.47	596.4	552.0	-7.44
			Age				
Bristol Bay	Ocean	20	0.296	0.009	2.34	2.48	14.21
Cook Inlet	Ocean	19	0.420	0.010	2.61	2.79	6.90

**Note**: n, number of years considered; r, correlation coefficient; b, regression slope (average annual change in weight). The calculated values (weight, length, and age for the weight, length, and age sections of the table, respectively) were computed from available data.

\*\*P < 0.01.

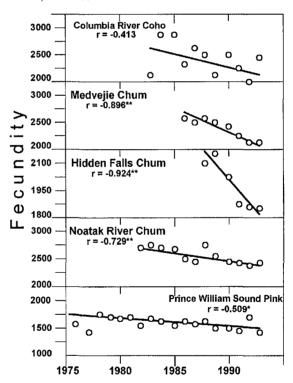
Fig. 10. Change in average weight, length, and age among Bristol Bay and Cook Inlet sockeye salmon.



adaptation to specific spawning and habitat conditions. Healey (1982) demonstrated the importance of size for the survival of small salmon, a principle that is presumed true for larger salmon as well.

The reproductive value of size is attributable to physical strength and longevity on the spawning ground, as well as to advantages in the numbers and vitality of sexual products (egg size, sperm motility). Foerester and Pritchard (1941) showed that sockeye and pink salmon follow principles governing the relationship between fecundity and body size similar to those of other species. Specifically, decreased body size and the attendant reductions in fecundity and egg size equate to greatly reduced abundance and survivorship of the progeny. Beacham and Murray (1987) showed that small eggs produce smaller alevin and fry that in turn inherit a diminished probability of survival. The effects of reduced average size among salmon

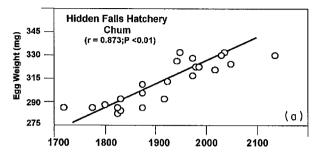
Fig. 11. Mean fecundity of hatchery coho, chum, and pink salmon, 1982–1993.

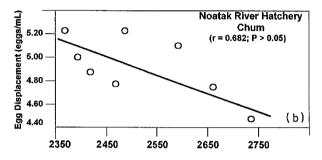


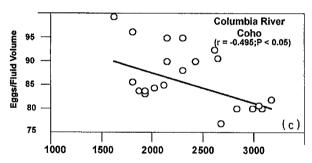
may first be evident in populations in which large body size is an important adaptation.

Average size data extending for more than several decades are rare. Ricker (1994) reported several cycles of increasing and decreasing size tendencies among British Columbia sockeye back to 1912. Welch and Morris (1994) found evidence of long-term density-dependent changes in average size among British Columbia pink salmon for the period 1927–1993. Such fluctuations probably occurred because of natural population pressures independent of influences from enhancement programs. The remarkable expansion of Pacific salmon enhancement programs since 1975, however, precludes simple comparison of the changes in average size documented here

**Fig. 12.** Relationship between egg size and fecundity in summer chum (a), fall chum (b), and coho (c) salmon, based on data from hatcheries in Alaska and Washington state.







with anything that has occurred previously. Artificially propagated salmon enjoy several survival advantages over wild populations, such as feeding to attain optimal fry size and abundance independent of environmental influence. Consequently, deleterious effects of reductions in average adult size will very likely appear first, and be most pronounced, among wild populations. As programs for the artificial propagation of Pacific salmon expand and the technology improves, the allocation of increasingly limited ocean resources may need to be recognized to assure optimal common management of salmon.

#### References

Bagenal, T.B. 1969. Relationship between egg size and fry survival in brown trout *Salmo truta* L. J. Fish Biol. 1: 349–353.

Beacham, T.D., and Murray, C.B. 1987. Adaptive variation in body size, age, morphology, egg size, and developmental biology of chum salmon (*Oncorhynchus keta*) in British Columbia. Can. J. Fish. Aquat. Sci. **44**: 244–261.

Beacham, T.D., Withler, R.E., Murray, C.B., and Barner, L.W. 1988. Variation in body size, morphology, egg size, and biochemical genetics of pink salmon in British Columbia. Trans. Am. Fish. Soc. 117: 109-125. Beamish, R.J., and Bouillon, D.R. 1993. Pacific salmon production trends in relation to climate. Can. J. Fish. Aquat. Sci. 50: 1004-1006.

Brodeur, R.D. 1990. A synthesis of the food habits and feeding ecology of salmonids in marine waters of the North Pacific. INPFC Doc. No. FRI-UW-9016. Available from K. Myers, Fisheries Research Institute, University of Washington, Seattle, WA 98195.

Davidson, F.A., and Vaughan, E. 1941. Relation of population size to marine growth and time of spawning migration in pink salmon (*Oncorhynchus gorbuscha*) of southeastern Alaska. J. Mar. Res. 4: 231–246.

Fleming, I.A., and Gross, M.R. 1990. Latitudinal clines: a trade-off between egg number and size in Pacific salmon. Ecology, 71: 1–11.

Foerester, R.E., and Pritchard, A.L. 1941. Observations on the weight relation of egg content to total length and weight in the sockeye salmon (*Oncorhynchus nerka*) and the pink salmon (*O. gorbuscha*). Trans. R. Soc. Can. 35: 51–60.

Forbes, L.S., and Peterman, R.M. 1994. Simple size-structured models of recruitment and harvest in Pacific salmon (*Oncorhynchus* spp.). Can. J. Fish. Aquat. Sci. 51: 603–616.

Godfrey, H. 1959a. Variations in annual average weights of British Columbia pink salmon 1944–1958. J. Fish. Res. Board Can. 16: 329–337.

Godfrey, H. 1959b. Variation in the annual average weight of chum salmon caught in British Columbia waters, 1946–1958. J. Fish. Res. Board Can. 16: 553–554.

Hayashizaki, K.I., and Hitoshi, I. 1996. Size decrease of chum salmon, *Oncorhynchus keta* in Tohoku districts, Japan. *In Pro*ceedings of the International Symposium on Biological Interactions of Enhanced and Wild Salmonids. *Edited by B.E.* Riddell and C.C. Woods. Can. Spec. Publ. Fish. Aquat. Sci. In press.

Healey, M.C. 1982. Timing and relative intensity of size selective mortality of juvenile chum salmon (*Oncorhynchus keta*) during early sea life. Can. J. Fish. Aquat. Sci. 39: 952–957.

Healey, M.C., and Heard, W.R. 1984. Inter- and intra-population variation in the fecundity of chinook salmon (*Oncorhynchus tshawytscha*) and its relevance to life history theory. Can. J. Fish. Aquat. Sci. 41: 476–483.

Helle, J.H. 1979. Influence of marine environment on age and size at maturity, growth, and abundance of chum salmon, *Oncorhynchus keta* (Walbaum), from Olsen Creek, Prince William Sound, Alaska. Ph.D. thesis, Oregon State University, Corvallis, Oreg. University Microfilms Int. No. 7927127.

Helle, J.J. 1989. Relation between size-at-maturity and survival of progeny in chum salmon, *Oncorhynchus keta* (Walbaum). J. Fish Biol. 35(Suppl. A): 99-107.

Helle, J.H., and Hoffman, M.S. 1995. Size decline and older age at maturity of two chum salmon (*Oncorhynchus keta*) stocks in western North America, 1972–1992. *In Climate change and northern fish populations. Edited by R.J. Beamish. Can. Spec. Publ. Fish. Aquat. Sci. No. 121. pp. 243–250.*

Ishida, Y., Ito, S., Kaeriyama, M., McKinnell, S., and Nagasawa, K. 1993. Recent changes in age and size of chum salmon (*Oncorhyn-chus keta*) in the North Pacific Ocean and possible causes. Can. J. Fish. Aquat. Sci. 50: 290–295.

Kaeriyama, M. 1989. Aspects of salmon ranching in Japan. Physiol. Ecol. Jpn. Spec. Vol. 1. pp. 625–638.

Kaeriyama, M. 1996. Production trends of salmon enhancement in Japan. In Proceedings of International Symposium on Biological Interactions of Enhanced and Wild Salmonids. Edited by B.E. Riddell and C.C. Woods. Can. Spec. Publ. Fish. Aquat. Sci. In press.

Kaeriyama, M., and Urawa, S. 1992. Future research by the Hokkaido Salmon Hatchery for the proper maintenance of Japanese salmonid stocks. *In Proceedings of the International Workshop on Future Salmon Research in the North Pacific Ocean, Shimizu*,

- Japan, November 11, 1992. *Edited by* Y. Ishida, K. Nagasawa, D.W. Welch, K.W. Myers, and A.P. Shershnev. National Research Institute of Far Seas Fisheries, Shimizu, Japan. pp. 57–62.
- Myers, K.W., Walker, R.V., Fowler, S., and Dahlberg, M.L. 1990. Known ocean ranges of stocks of Pacific salmon and steelhead as shown by tagging experiment, 1956–1989. INPFC Doc. No. FRI-UW-9009. Available from K. Myers, Fisheries Research Institute, University of Washington, Seattle, WA 98195.
- Neter, J., Wasserman, W., and Kutner, M.H. 1985. Applied linear statistical models. R.D. Irwin. Inc., Homewood, Ill.
- Oregon Department of Fish and Wildlife. 1993. Status report: Columbia River fish runs and fisheries, 1938–92. Oregon Department of Fish and Wildlife, 2040 Southeast Marine Science Drive, Newport, OR 97365.
- Peterman, R.M. 1984. Density-dependent growth in early ocean life of sockeye salmon (*Oncorhynchus nerka*). Can. J. Fish. Aquat. Sci. 41: 1825–1829.
- Ricker, W.E. 1980. Causes of the decrease in age and size of chinook salmon (*Oncorhynchus tshawytscha*). Can. Tech. Rep. Fish. Aguat. Sci. No. 944.
- Ricker, W.E. 1981. Changes in the average size and average age of Pacific salmon. Can. J. Fish. Aquat. Sci. 38: 1636–1656.
- Ricker, D.E. 1994. Trends in the average size of Pacific salmon in Canadian catches. *In* Climate change and northern fish populations, *Edited by* R.J. Beamish. Can. Spec. Publ. Fish. Aquat. Sci. No. 121. pp. 593–602.
- Ricker, W.E., and Wickett, W.P. 1980. Causes of the decrease in size of coho salmon (*Oncorhynchus kisutch*). Can. Tech. Rep. Fish. Aquat. Sci. No. 971.

- Ricker, W.E., Bilton, H.T., and Aro, K.V. 1978. Causes of the decrease in size of pink salmon (*Oncorhynchus gorbuscha*). Tech. Rep. Fish. Mar. Serv. Can. No. 820.
- Rogers, D.E. 1980. Density-dependent growth of Bristol Bay sockeye salmon. *In* Salmonid ecosystems of the North Pacific. *Edited by* W.J. McNeil and D.C. Himsworth. Oregon State University Press, Corvallis, Oreg. pp. 267–283.
- Rogers, D.E. 1994. Forecasts of the 1995 sockeye salmon runs to Bristol Bay. INPFC Doc. No. FRI-UW-9417. Available from D. Rogers, Fisheries Research Institute, University of Washington, Seattle, WA 98195.
- van den Berghe, E.P., and Gross, M.R. 1989. Natural selection resulting from female breeding competition in Pacific salmon (*Oncorhynchus kisutch*). Ecology, **43**: 125–140.
- Welch, D.W., and Morris, J.F.T. 1994. Evidence for density-dependent marine growth in British Columbia pink salmon populations. Document submitted to the Annual Meeting of the North Pacific Anadromous Fish Commission (NPAFC), Vladivostok, Russia, October 1994. NPAFC Doc. No. 97. Available from D. Welch, Pacific Biological Station, Nanaimo, BC V9R 5K6, Canada.
- Welch, D.W., and Noakes, D.J. 1993. Trends in catch and average size of Pacific salmon in Canada, with a report on 1992 escapement levels. Document submitted to the Annual Meeting of the North Pacific Anadromous Fish Commission, Vancouver, B.C., November 1993. Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, B.C.

## Kuskokwim River Chinook Salmon Run Reconstruction by Age - DRAFT

					2003 (Aver	age Chir	100k Abund	lance Y	(ear)		
	-	Αį	ge-4	Aş	ge-5	Αş	Age-6		Age-7	To	otal
		%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	158	51.4%	81	35.6%	56	10.6%	17	2.3%	4	100.0%	158
Sport	401	27.8%	112	42.4%	170	26.9%	108	2.9%	12	100.0%	401
Escapement	166,809	27.8%	46,427	42.4%	70,659	26.9%	44,877	2.9%	4,846	100.0%	166,809
Total	235,156	21.8%	51,230	- 42.9%	100,847	31.3%	73,540	4.0%	9,403	100.0%	235,156
Age Class Exp	ploitation Rate		9.4%		29.9%		39.0%		48.5%		29.1%

# What if we allowed a commercial harvest of 40,000 Chinook with restricted mesh gillnets (6 inch mesh or smaller)?

2003, but what if there was a commercial harvest of 40,000 Chinook Salmon with gillness restricted to  $\leq$  6 inch mesh?

·	_	Ag	e-4	A	.ge-5	A	ge-6	_	Age-7	To	otal
	_	% :	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	40,000	51.4%	20,578	35.6%	14,258	10.6%	4,242	2.3%	922	100.0%	40,000
Sport	401										1
Escapement	126,967	20.4%	25,931	44.5%	56,457	32.0%	40,651	3.1%	3,928	100.0%	126,967
Total (ex. sport harv.)	234,755	21.8%	51,118	42.9%	100,678	31.3%	73,432	4.0%	9,392	100.0%	234,755
Age Class Exploitation	Rate (excluding	g sport f	49.3%		43.9%		44.6%	_	58.2%		45.9%

				_	2003 (Aver	age Chir	ook Abund	lance <mark>Y</mark>	(ear)		
	-	Aş	ge-4	A	ge-5	Αg	ge-6		Age-7	To	otal
		%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish
				<u>.</u> ,		· · · · · ·					
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	158	51.4%	81	35.6%	56	10.6%	17	2.3%	4	100.0%	158
Sport	401	27.8%	112	42.4%	170	26.9%	108	2.9%	12	100.0%	401
Escapement	166,809	27.8%	46,427	42.4%	70,659	26.9%	44,877	2.9%	4,846	100.0%	166,809
Total	235,156	21.8%	51,230	42.9%	100,847	31.3%	73,540	4.0%	9,403	100.0%	235,156
Age Class Exp	ploitation Rate		9.4%		29.9%		39.0%		48.5%	,	29.1%

# What if we allowed a commercial harvest of 40,000 Chinook with unrestricted mesh gillnets (large mesh or smaller)?

2003, but what if there was a commerical harvest of 40,000 Chinook Salmon with gillnet mesh size unrestricted?

		Ag	ge-4	Aş	ge-5	Ag	ge-6	A	ge-7	Tc	otal
	-	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	40,000	6.8%	2,720	44.2%	17,680	42.1%	16,840	6.7%	2,680	100.0%	40,000
Sport	401										
Escapement	126,967	34.5%	43,789	41.8%	53,035	22.1%	28,053	1.7%	2,170	100.0%	126,967
Total (ex. sport harv.)	234,755	21.8%	51,118	42.9%	100,678	31.3%	73,432	4.0%	9,392	100.0%	234,755
Age Class Exploitation l	Rate (excludin	g sport f	14.3%		47.3%		61.8%		76.9%		45.9%

RCBI, p2.

RC 81, p 3 of 3

## Comparison of harvest by age, restricted vs. unrestricted mesh type What if ... restricted mesh gillnets (6 inch mesh or smaller)?

2003, but what if there was a commercial harvest of 40,000 Chinook Salmon with gillnets restricted to  $\leq$  6 inch mesh?

The number of each age class harvested in the Sport Fishery is not included because age-class proportions are not known for the sport fishery. The numbers reported in preceding tables were back-calculated using the age-class proportions of the escapement. Adjusting the commercial harvest changes the abundances and proportions of each age class available for escapement. The logic problem is that you need to subtract the known harvest from the known "run-size" in order to obtain this percentage, but you can't do that without knowing the age composition of the sport fishery. The only solution I found was to omit the sport fishery information in your "scenarious." Same comment for subsequent tables.

	_	Ag	e-4	A	ge-5	A	ge-6	<i>P</i>	\ge-7	To	otal
	_	%	No. of Fish	%	No. of Fish	<u></u> %	No. of Fish	%	No. of Fish	<u>%</u>	No. of Fish
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	40,000	51.4%	20,578	35.6%	14,258	10.6%	4,242	2.3%	922	100.0%	40,000
Sport	401										
Escapement	126,967	20.4%	25,931	44.5%	56,457	32.0%	40,651	3.1%	3,928	100.0%	126,967
Total (ex. sport harv.)	234,755	21.8%	51,118	42.9%	100,678	31.3%	73,432	4.0%	9,392	100.0%	234,755
, , ,	,		,	72.970	,	51.570	,	7.070		100.076	′
Age Class Exploitation	Rate (excludin	g sport f	49.3%		43.9%		44.6%		58.2%		45.9%

## What if ... unrestricted mesh gillnets (large mesh or smaller)?

2003, but what if there was a commercial harvest of 40,000 Chinook Salmon with gillnet mesh size unrestricted?

	_	Age	e-4	Aş	ge-5	Aş	ge-6		Age-7	To	otal
	_	% 1	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish	%	No. of Fish
Subsistence	67,788	6.8%	4,610	44.2%	29,962	42.1%	28,539	6.7%	4,542	100.0%	67,788
Commercial	40,000	6.8%	2,720	44.2%	17,680	42.1%	16,840	6.7%	2,680	100.0%	40,000
Sport Escapement	401 126,967	34.5%	43,789	41.8%	53,035	22.1%	28,053	1.7%	2,170	100.0%	126,967
Total (ex. sport harv.) Age Class Exploitation	234,755 Rate (excluding	21.8% g sport f	51,118 14.3%	42.9%	100,678 47.3%	31.3%	73,432 61.8%	4.0%	9,392 76.9%	100.0%	234,755 45.9%

RC&1, p3.f3



January 28, 2010

To: Board of Fisheries From: Greg Roczicka

I would like to offer an amendment to proposal #67:

The proposal as written completely repeals the use of 8 inch gear in the Kuskokwim commercial fishery.

The amendment would be to insert language so 5 AAC 07.331(c) would now read "In Districts 1 & 2 salmon may be taken only with gillnets with six inch or smaller mesh, except that in District 1, <u>after July 1st</u>, the commissioner may open fishing periods during which the gillnet mesh size may be no greater than eight inches."

This change would alleviate any concerns for a directed Chinook harvest targeting on the large spawners during the bulk of the run, while still allowing the Department to have the 8 inch gear as a management tool during the peak of the sockeye and chum runs which was stated as their only foreseeable use of the 8 inch option. For practical management purposes this represents a good compromise for all involved. I have spoken with Department staff regarding this change and they have no objections.

RC 83

RC from Bonnie Williams, PO Box 82812, Fairbanks AK 99709 – as given in testimony 1/27/10

I recommend that you consider each of the following:

- Pass a resolution calling for a joint meeting with the Northern Pacific federal board
- 1. At that meeting request that they roll back the allowable bycatch of the Pollock fleet from 60,000 to 20,000
- Request that they use the federal observers aboard each vessel to ensure a variable delay in restarting fishing contingent upon the volume of bycatch of that vessel

Pass a resolution and send an accompanying letter
 from the entire Board to the Legislature and Governor

requesting \$25 million for salmon research related to the Yukon River and its tributaries, and the Norton Sound area.

- Pass a resolution and send an accompanying letter from the entire Board to F&G, Governor and Legislature requesting the implementation of a new program.
  - Specifically, subsistence fishers would be paid to catch and hold in live traps salmon both female and male
  - 2. F&G employees would collect roe and sperm into buckets, and transport to an appropriate upstream stream or small river and place into appropriate habitat
  - 3. Subsistence fishers would retain and use the salmon flesh, minus the roe, and would also have received some dollar amount to be determined by F&G on a per fish basis.
  - 4. F&G would provide the live trap nets.
  - 5. The objective is to ensure that regardless of the number of salmon caught, the majority of salmon

roe nonetheless arrives at a nesting area fertilized, and that therefore the offspring of the caught fish are still born, and can return themselves in 3-7 years. This would reduce the interception of future fish.

- Ban all commercial fishing/sales of Yukon River salmon roe. Maintain that ban until such time as at least two years of adequate returns and adequate escapements have occurred.
- Require a smaller mesh size on all gill nets used in the Yukon River and Norton Sound fisheries for commercial, and subsistence fishing. F&G should buy the smaller-mesh nets and swap out net for net. (Rationale here is that Yukon commercial fishermen lack the funding to buy new nets.)
- Consider changes to allowable salmon fishing in False Pass.

 Reject any proposal that increases the opportunity for salmon fishing in Norton Sound or the Yukon and its tributaries, until stocks have truly recovered.

When a disaster has been declared, then all participants, all affected parties, must necessarily participate in the consequences. And there must be positive, pro-active proposals, not just negative proposals. Simply changing the mesh size doesn't do a thing, if all fishing is banned anyway.

On more local issues, I like proposal 56 redefining more logically the line on the Chatanika River, but ask that in writing the regulation, it be specifically stated whether the line is precisely at the upstream edge of the Elliott bridge, or the downstream edge.

On the court-returned issue involving Subsistence versus Personal Use at Chitna, I strongly believe that the Chitna dipnetters are true subsistence users, and that the Board should restore that finding. Where you live doesn't define a subsistence user.

RC84

#### Proposed substitute action for Proposals: 88, 89, 90, 91, 92, 93, and 94 January 28, 2010

Mr. Chairman and member of the Alaska Board of Fisheries:

We, the residents, subsistence, and commercial fishermen of the lower and middle Yukon River, in consultation with our elders in attendance submit the following for the board to consider as a substitute for proposals: 88, 89, 90, 91, 92, 93, and 94.

"Maintain status quo in mesh size and mesh depth regulation, institute a 5-7 day closure on the first pulse through the entire river, provide the Alaska Department of Fish & Game with the "Emergency Order" authority to open/close the Chinook subsistence/commercial fishery prior to, during or after the 5 to 7 day closure. This management mandate by the Alaska Board of Fisheries will sunset upon the removal of the Yukon River Chinook salmon stock of concern or sooner at the discretion of the board."

The similar authority last summer, in our opinion, resulted in the desired results the proponents of the above listed proposals are pursuing. The similar management action, in the summer of 2009, resulted in improved quality of escapement into the Alaskan and Canadian escapement enumeration projects, allowed for the Canadian escapement border obligation to be met and exceeded.

Signed:

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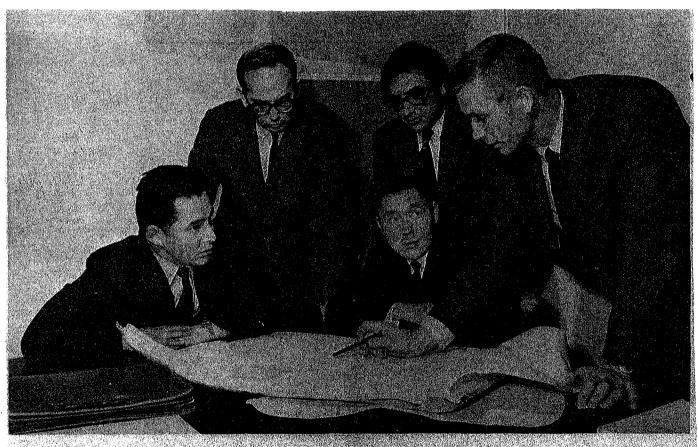
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dependence upon subsistence way of life and for the Board of Fisheries to recognize the Federal Governments trust and responsibilities to protect our Regis health and well being as the Native people of the State.



As you can see on this picture in 1968-1969, EDA Federal Government provided the first funding for Lower Yukon, Wade Hampton District, for fishing economic development.



#### COOPERATIVE LEADERS DISCUSS GRANTS

Two fishing cooperatives have received Economic Development Administration grants and loans for construction of freezer barges. They are the Yukon Delta Fish Marketing Cooperative, Emmonak, \$775,000, and the Kuskokwim Fishermen's Cooperative, Bethel, \$662,500. Discussing the grants are, seated, at left, Jacob Johnson,

manager of the cooperative at Emmonak, and Robert Nick, manager of the Bethel cooperative Standing are, from left, Jim Shea, EDA public works project officer; Harold Wolff, director of the Community Enterprise Development Corp., and Dave Wenzlaff, EDA construction manager

Thank you

Enclose back up documents



#### Technical Paper No. 346

### Alaska Subsistence Salmon Fisheries 2007 Annual Report

James A. Fall

Liliana Naves

**Caroline Brown** 

Lisa Hutchinson-Scarbrough

Michael F. Turek

**Terri Lemons** 

Nicole Braem

Victoria Ciccone

James J. Simon

Theodore M. Krieg

William E. Simeone

and

Davin L. Holen

**David Koster** 

September 2009

Alaska Department of Fish and Game



Division of Subsistence

#### **CHAPTER 4: YUKON AREA**

#### BACKGROUND

Residents of the Yukon River drainage have long relied on fish for human food and other subsistence uses. While nonsalmon fish species provide an important component of the overall fish harvest (Andersen et al. 2004, Brown et al. 2005a), salmon comprise the bulk of the fish harvested for subsistence. Chinook salmon, summer and fall chum salmon, and coho salmon comprise the majority of the salmon harvests in the Yukon river drainage; the number of salmon harvested for subsistence in this region is significant. Unlike many marine and coastal fisheries in which commercial harvests predominate, subsistence salmon harvests within the Yukon drainage often exceed commercial, sport, and personal use harvests combined.

Drift gillnets, set gillnets, and fish wheels are used by Yukon area fishers to harvest the majority of salmon. Set gillnets are utilized throughout the Yukon area, often in the main rivers and coastal marine waters, while drift gillnets are used extensively in some parts of the river (i.e., by state regulation, that portion of the Yukon drainage from the mouth to a point 18 mi downstream of Galena). Fish wheels are a legal subsistence or noncommercial gear type throughout the Yukon drainage, although due to river conditions and the availability of wood for building materials, they are used almost exclusively only on the middle and upper Yukon and Tanana rivers.

Depending on the area of the Yukon River drainage and salmon species' run timing, subsistence fishing occurs from late May through early October. Fishing activities are based either from fish camps or from the home villages; fishing patterns and preferred sites vary from community to community. Extended family groups, typically representing several households, often undertake subsistence salmon fishing together. Households and related individuals typically cooperate to harvest, process, preserve, and store salmon for subsistence uses. (For more detail on subsistence uses of Yukon River salmon, see ADF&G (1987a), ADF&G (1987b), and ADF&G (1988)).

The majority of the subsistence salmon harvest is preserved for later uses by freezing, drying, or smoking; the head, cut scraps, and viscera are often fed to dogs. Chinook salmon are harvested and processed primarily for human consumption, although those fish deemed not suitable for human consumption due to the presence of the fungus *Ichthyophonus hoferi* or some other disease or disfigurement are often fed to dogs. Small Chinook salmon ("jacks") or postspawn fish may also be fed to dogs. In addition, while chum and coho salmon are primarily taken for human consumption, relatively large numbers are harvested and processed to feed sled dogs. Fall chum salmon and coho salmon typically arrive in the upper portion of the drainage late in the season, coinciding with freezing weather, allowing fish to be "cribbed" for use as dog food. This method involves the natural freezing of whole (uncut) fish. The practice of keeping sled dogs is much more common in communities along the upper Yukon area than in the lower river area.

#### REGULATIONS

Regulation and management of Yukon River drainage subsistence salmon fishing follows the Yukon River Drainage Subsistence Salmon Fishery Management Protocol, which provides a framework for coordinated subsistence fisheries management between ADF&G and the federal subsistence management programs in the Yukon River drainage. This protocol is applied through a Memorandum of Agreement between state and federal agencies which formalizes the working relationships between state and federal managers and fosters cooperation with federal regional

advisory councils and fisheries interest groups. State managers are responsible for management of state subsistence, commercial, recreational, and personal use fisheries in all waters. Federal managers are responsible for management of subsistence fishing by qualified rural residents in applicable federal waters. The protocol also directs state and federal managers to solicit input from the Yukon River Drainage Fisheries Association (YRDFA), the Yukon River Coordinating Fisheries Committee (YRCFC), and other stakeholders during the decision-making process.

The majority of the United States' portion of the Yukon area is open to subsistence fishing. However, the Joint Board has defined a portion of the Tanana River in the Yukon River drainage as lying within the Fairbanks Nonsubsistence Area (5 AAC 99.015). Subsistence fisheries may not be authorized within nonsubsistence areas; the harvest of fish for home uses in these nonsubsistence areas occurs under personal use and sport fishing regulations. Standard permit conditions include prohibition of fishing within 300 ft of a dam, fish ladder, weir, culvert, or other artificial obstruction.

Over the last 2 decades, several regulatory changes have affected the subsistence salmon fishery in the Yukon River drainage. In 1993, the BOF adopted regulations which separated subsistence and commercial salmon fishing times in districts 1, 2, and 3 and in the lower portion of District 4 (Subdistrict 4A) (Figure 4-1). In these areas, subsistence salmon fishing is allowed 7 days per week but may not occur 24 hours prior to and immediately following the commercial salmon fishing season. By regulation, once the commercial season is open, subsistence salmon fishing may not occur 18 hours immediately before, during, and 12 hours after each district 1, 2, or 3 summer season commercial fishing period. During the fall season in districts 1, 2, and 3, subsistence fishing may not occur 12 hours immediately before, during, and 12 hours after each commercial fishing period. In Subdistrict 4A, subsistence salmon fishing may not occur 12 hours immediately before, during, and 12 hours after each commercial salmon fishing period throughout the season. In the upper portion of District 4 (subdistricts 4B and 4C) and in subdistricts 5A, 5B, and 5C, subsistence salmon fishing is allowed 7 days per week until 24 hours prior to and immediately following the commercial salmon fishing season. In these areas, subsistence salmon fishing periods coincide with commercial salmon fishing periods. Additional subsistenceonly salmon fishing periods may be allowed during the commercial salmon fishing season. In Subdistrict 5D, subsistence salmon fishing is allowed 7 days per week, regardless of commercial activities. Since 1994 (with the exception of 1998<sup>10</sup>) the subsistence salmon fishing schedule in Subdistrict 5A has allowed subsistence salmon fishing 5 days per week following the closure of the commercial salmon fishing season. Since 1988, subsistence fishing in the Lower Tanana River drainage in subdistricts 6A and 6B has been allowed for two 42-hour periods per week unless altered by emergency order. 11 In the Upper Tanana River drainage upstream of the Volkmar (north bank) and Johnson (south bank)<sup>12</sup> rivers, subsistence fishing is allowed 7 days per week.

- 10. In 1998, the BOF relaxed restrictive elements of the Toklat River Fall Chum Salmon Rebuilding Management Plan and allowed Subdistrict 5A to subsistence salmon fish 7 days per week. When the escapement objectives were not subsequently met, the restrictive elements of the salmon rebuilding plan were reinstated and subsistence fishing in Subdistrict 5A was reduced during the 1999 season.
- 11. In the Lower Tanana River drainage, the fishery to harvest salmon for home use in Subdistrict 6C is a personal use fishery. Its fishing schedule matches those of the 6A and 6B subsistence salmon fisheries, namely, that personal use fishing is allowed for two 42-hour periods per week unless altered by emergency order. In that portion of Subdistrict 6B from the downstream side of the upper Tolovana to 3 miles upstream of Totchaket Slough (the Old Minto area), subsistence fishing is allowed 5 days per week.
- 12. Salmon fishing is closed in that portion of the Tanana River drainage upstream of Subdistrict 6C, from the Salcha River upstream to the Volkmar River (north bank) and to the Johnson River (south bank). The area

In 2005, the FSB established a drift gillnet fishery in subdistricts 4B and 4C, which includes the mainstem Yukon River villages of Galena and Ruby. Participation in this fishery was open to qualified rural residents under a federal subsistence permit, limited to gillnets that were no longer than 150 ft and no deeper than 35 meshes. The mesh size was unrestricted so as to target Chinook salmon. In 2007, the federal drift gillnet fishery occurred between June 10 and June 14 during the last 18 hours of the each subsistence salmon fishing opening in the federal public waters of subdistricts 4B and 4C, using drift gillnets no more than 150 ft long and 35 meshes deep a total of 12 permits were issued, with a combined reporting of 13 Chinook salmon harvested.

Restrictions on subsistence fisheries occurred during the fall season in 1993, 1998, 2001, and 2002, with a complete closure in 2000. Also in 2000, for the first time in regulatory history, restrictions were imposed on the summer portion of the subsistence salmon fishery to protect Chinook salmon and summer chum salmon populations. Because of the inability to maintain expected yields and harvestable surpluses above escapement needs for several years, the BOF classified the Yukon River Chinook salmon stock as a stock of yield concern (Lingnau and Salomone 2003).

In 2001, as a result of the declared disaster, the BOF instituted a new subsistence schedule on the Yukon River. The schedule was intended to fulfill several goals: 1) increase the quality of escapement, 2) distribute subsistence opportunity among users during years with no commercial fishing, and 3) reduce the impact of harvest on any one stock by spreading the harvest throughout the run, thereby providing windows of time that salmon may migrate upriver with reduced exploitation. The schedule, based on past fishing schedules, is initiated each year based on the historical, average run timing entry into the Yukon River for Chinook salmon. Once initiated, the schedule is implemented chronologically upriver. The schedule is believed to provide reasonable opportunity for subsistence users to achieve their harvest goals when salmon runs are below average. Table 4-1 presents the subsistence fishing schedule.

Table 4-1	-2007	subsistence	fishing	schedule	by district
[an] 6 4-1.	2007	subsistence	HSDHIP	scheaule	DV OISHICI

Geographic area-district	Opening	Schedule to begin	***************************************
Coastal District	7 days/week	By regulation	
District 1	Two 36-hour periods	May 28, 2007	
District 2	Two 36-hour periods	May 30, 2007	
District 3	Two 36-hour periods	June 1, 2007	
District 4; Subdistricts 4A, 4B, 4C	Two 48-hour periods	June 10, 2007	
Subdistricts 5A, 5B, 5C	Two 48-hour periods	June 19, 2007	
Subdistrict 5D	7 days/week	By regulation	
District 6	Two 42-hour periods	By regulation	
Old Minto Area	5 days/week	By regulation	
Koyukuk River	7 days/week	By regulation	

Subsistence fishing is allowed 7 days per week in all areas prior to the established schedule dates. In 2003, the BOF clarified the window schedule to allow ADF&G to relax the schedule if run abundance allowed commercial fishing. 2007 marked the sixth annual implementation of the window schedule. Preseason outlooks for 2007 indicated that the Chinook salmon run would be similar in abundance to the 2006 run providing for: escapements, a normal subsistence harvest,

is closed to salmon fishing other than sport fishing and is included in the Fairbanks Nonsubsistence Area. Whitefishes and longnose suckers may be harvested upstream of the Salcha River under a personal use permit.

and a below average commercial harvest (Hayes and Clark 2007). Early run assessment projects indicated that the Chinook and summer chum salmon runs were adequate in strength to allow continued subsistence fishing on the window schedule and for a small commercial fishery. Once commercial fishing is opened, the subsistence schedule typically reverts to the pre-2001 fishing schedule chronologically upriver—7 days per week, 24 hours per day, except for 18 hours prior to, during, and 12 hours after commercial openings. Similar to 2006, ADF&G scheduled a short commercial opening on June 15, 2007, based on the preseason projection. Although the June 15 commercial opening in District 2 occurred early in the run, the subsistence schedule was not relaxed until June 19 in District 1. Thus, in 2007, just as in 2003–2006, the window schedule was relaxed for most parts of the river for at least a portion of the summer season (Hayes and Clark 2007).

#### Subsistence Harvest Assessment Methods

For the majority of villages within the Yukon area, there are no regulatory requirements to report subsistence salmon harvests. For these villages, ADF&G utilizes a voluntary survey program to estimate the total subsistence salmon harvest. Harvest information is collected using a combination of subsistence harvest calendars mailed prior to fishing activities, postseason household interviews, postseason telephone interviews, and postseason post card reminders. In road-accessible portions of the Yukon area, including the majority of the Tanana River drainage (subdistricts 6A and 6B and the Upper Tanana River drainage), the Yukon River drainage between Hess Creek and the Dall River (known as the Yukon River bridge area), the upper portion of Subdistrict 5D between the upstream mouth of Twenty-two Mile Slough and the U.S.—Canada border, and, as of 2004, the Rampart area (western end of Garnet Island to the mouth of Hess Creek), and the Middle and South Fork area of the Koyukuk River, subsistence fishers are required to obtain an annual household permit prior to fishing, document their subsistence salmon harvest on the household permit, and return it to ADF&G at the end of the season.

Prior to salmon fishing activities, subsistence harvest calendars are mailed to all identified fishing households within the survey communities. The Lower Yukon area calendars contain the months of May through September and the Upper Yukon area calendars contain the months of June through October. Additional calendars are mailed to those households for which fishing activities are unknown, and are also made available to households upon request from ADF&G offices in Emmonak and Fairbanks. The calendars provide space for fishers to record their daily subsistence harvest of salmon by species. Calendars are return-postage-paid and are mailed to ADF&G research staff during postseason trips to the villages, especially to conduct the postseason salmon survey. Posters sent to village post offices and announcements on area radio stations remind fishers to give their calendars to research staff. In 2007, Division of Commercial Fisheries staff distributed calendars to all households identified as participating in some level of fishing; households identified as nonfishing households did not receive calendars. An estimated 921 calendars were sent to Lower Yukon households, 589 calendars to Upper Yukon River households, for a total of 1,510 calendars. About 21% of these (316) were returned either by mail or through research staff during their fall surveys. Calendars provide additional Yukon area run timing information that is not obtained by other data collection methods (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication).

In addition to the harvest calendars, ADF&G Division of Commercial Fisheries staff conduct postseason in-person interviews with a stratified random sample of all households within the Yukon

River drainage. Survey questions focus on Chinook, summer chum, fall chum, and coho salmon, but households are also asked about other species as well, such as pink salmon (primarily taken by coastal communities), northern pike *Esox lucius*, whitefishes, and sheefish. Some households that are not contacted in person by the surveyors are contacted by telephone. Those households not contacted by telephone are mailed a survey questionnaire and a postage-paid return envelope.

A subsistence permit is required in the road-accessible portions of the Yukon River drainage. Subsistence fishers record their daily salmon harvests on a household permit and return the permit within 10 days of the expiration date on the permit. Subsistence permit applications are mailed to all who returned the prior year's permit, along with instructions on how to apply by mail. In addition, ADF&G staff travel to select villages so that applicants can be issued permits in person. Permits are also issued in several ADF&G offices or by mail throughout the season. Those who do not return permits are sent up to 2 reminder letters. Telephone contacts with households that do not respond to the reminder letters are attempted as a final measure.

Subsistence salmon permit holders in a portion of Subdistrict 6B (the Tanana River drainage above a point 3 miles upstream of Totchaket Slough to the boundary with 6C) and the personal use fishers in Subdistrict 6C are required to report their harvests weekly for in-season management purposes. To maximize the return of permits, ADF&G staff also send reminder letters to these households. A total of 508 subsistence and personal use permits were issued in 2007, and 474 [408 subsistence (93%) and 66 personal use (97%)] were returned (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication). Most unreturned permits are considered to be unfished, as subsistence fishing households are not eligible to receive a permit the following year until the previous year's permit is returned.

In 2007, Division of Commercial Fisheries staff interviewed 1,060 households along the Yukon River (out of 1,327 selected to be interviewed) concerning their subsistence salmon harvests. Also in 2007, 408 subsistence and 66 personal use permits were returned. Based on these different methods of collecting harvest data, it was estimated that approximately 1,468 Yukon area households (out of a total of approximately 2,861 area households) participated in subsistence and personal use fishing in 2007 (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication).

#### Subsistence Salmon Harvests in 2007

In 2007, 1,060 households (45% of the 2,353 total estimated households in Districts 1–5), 408 subsistence permit holders (93% of the 440 issued), and 66 personal use permit holders (97%) provided harvest data for the Yukon area subsistence–personal use salmon fishery (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication). The species composition of the estimated 2007 subsistence–personal use salmon harvest for the entire Yukon area included 55,292 Chinook salmon (20%), 93,075 summer chum salmon (34%), 99,120 fall chum salmon (37%), 22,013 coho salmon (8%), and 2,118 pink salmon (1%), for a total estimate of 271,618 salmon (Table 4-2; Figure 4-2). (Note that this is an estimated total based on household surveys and returned permits and calendars, and it includes subsistence harvests, personal use harvests, commercial harvests retained for home uses, and fish distributed from ADF&G test fisheries.) Since the disastrous harvest levels in 2000 (152,300 total salmon), subsistence Chinook and coho salmon harvests have generally increased while fall chum salmon harvests have rebounded. The 2007 harvest estimates registered above the 5-year averages for all

species except for coho salmon (approximately 800 fish below the 5-year average) and pink salmon (approximately 3,500 fish below the 5-year average). 2007 harvest estimates also exceeded recent 10-year averages for all species, except pink salmon. While low salmon abundance in 2001 closed commercial fishing in the Alaska portion of the Yukon river drainage, a small commercial fishery for Chinook and summer chum salmon has been offered in every year since, including 2007.

As shown in Table 4-3, the estimated subsistence and personal use harvest of 55,292 Chinook salmon in 2007 is above the most recent Yukon area 10-year average of 51,574 Chinook salmon, as well as the most recent 5-year average of 52,207 Chinook salmon. The estimated 2007 subsistence harvest of 93,075 summer chum salmon was above both the 5-year and 10-year averages (91,916 and 88,922, respectively). While summer chum salmon harvests have been relatively stable since 1990, they mark a significant decrease from the 1980s when harvests were higher, likely due to the then-existing commercial roe fishery in the middle Yukon River. The fall chum salmon harvest of 99,120 is also an increase in harvest since 1997 and registers above both the 5-year average of 63,744 fall chum salmon and the 10-year average of 61,575 fall chum salmon, both of which reflect multiple years of poor runs and harvests. It should be noted that regulatory restrictions were implemented so as to protect fall chum salmon stocks due to these poor runs in 1998, and 2000 through 2003. While 2007 harvests of fall chum salmon have climbed from earlier years' estimates, comparison with average fall chum salmon harvests for 1976–2006 begins to show the true magnitude of the harvest decline in this fishery between 2000 and 2003; the historical average (1976–2006) harvest of fall chum salmon was 118,052 fish (Table 4-3, Figure 4-3).

Subsistence harvests of coho salmon in 2007 were slightly below average at 22,013 compared to the 5-year average of 22,809 coho salmon but above the 10-year average of 21,598 coho salmon. Pink salmon harvest information is collected in several communities in the Lower Yukon area. Although pink salmon can be abundant in coastal and near-coastal communities of the Lower Yukon area, they are not typically targeted by fishers, and their harvest in the subsistence fishery remained low until 2002 (8,425 fish). An estimated 2,118 pink salmon were harvested in 2007, primarily harvested by communities in the coastal district.

Every year, various environmental or social factors affect the subsistence fishery. Ice breakup in the lower river occurred on May 18, four days earlier than average (as opposed to May 29 in 2006); after the first pulse of the run, around mid-June, Chinook salmon began entering the river at a slow, steady rate, rather than in their typical pulse pattern. A strong first pulse followed by a weak second pulse is unusual and the Chinook salmon run eventually developed to be not as strong as anticipated (Hayes and Clark 2007). Additionally, by emergency order, ADF&G allowed subsistence fishing 7 days per week in District 4 beginning July 6 and continued the drift gillnet fishing season for Chinook salmon for 1 additional week, because of the reported difficulty in catching Chinook salmon reported by middle river fishers (Hayes and Clark 2006).

Figure 4-4 provides a breakdown of the number of dogs by fishing district. Of the estimated 1,267 households (drainage wide) owning dogs, about 11% (144 households) are estimated to have fed their dogs whole salmon in 2007. Of the 4,925 dogs owned by fishing households in 2007, about 69% (3,388 dogs) were owned by households in the Upper Yukon River, which includes districts 4, 5, and 6. In 2007, the Division of Commercial Fisheries collected species-

<sup>13.</sup> Note that pink salmon cycle in their abundance; even years generally yield higher abundance with higher harvest rates, while odd years generally yield lower abundance in the river. In some years, pink salmon do make up an important part of the subsistence harvest when other preferred salmon species are less available.

specific information on the number of salmon retained for dog food from subsistence harvests in surveyed communities, but not in permit communities. In the Coastal District and in districts 1 through 5, an estimated 16,265 summer chum salmon, 28,717 fall chum salmon, and 5,232 coho salmon were retained for dog food from subsistence salmon harvests. An additional 33,836 whole salmon were fed to dogs by permit holders, including those users in District 6, which includes the communities of Rampart, Central, Circle, and Eagle. According to Division of Commercial Fisheries' data, 5,527 summer chum salmon, 80 fall chum salmon, and 39 coho salmon were retained from commercial harvests and used as dog food in Districts 1–5. Additionally, some portion of 13,595 fall chum salmon and 1,198 coho salmon retained during commercial periods likely went to feed dogs (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication).

Primary gear types used by fishing households in surveyed villages in 2007 included set gillnet (50%), drift gillnet (41%), and fish wheel (9%), largely the same as 2006 (Figure 4-5).

Since 1992, ADF&G has inquired as to whether surveyed households were meeting their subsistence salmon needs for that year. The disastrous fishing year in 2000 resulted in restrictions and closures in subsistence salmon fishing schedules and made it extremely difficult for fishing families to meet their needs (64% of surveyed households reported not meeting their needs in 2000). In 2003, ADF&G began asking this question in a species-specific manner, measuring responses by community and by species. Specifically, surveyed households were asked whether 100%, 75%, 50%, or <25% of their harvest needs were met for each species. Two checkboxes, "0%" and "no need," were added to the 2005 survey in order to distinguish those who had a need but no success in harvesting a species from those who had no need and therefore did not harvest any fish. According to 2007 data, less than one-half (47%) of all households reported meeting >75% of their needs for Chinook salmon, 48% reported meeting >75% of their needs for summer chum salmon, and 29% reported meeting >75% of their needs for fall chum salmon and coho salmon. This represents a decrease in households reporting that the majority of their needs were met from 2005 and also a decrease in what residents reported in 2006. Forty-six percent of households reported meeting less than one-half (<50%) of their needs for Chinook salmon; 47%, 69%, and 68% of households reporting meeting less than one-half their needs for summer chum salmon, fall chum salmon, and coho salmon, respectively (W. H. Busher, Yukon Area Fall Season Asst. Management Biologist, ADF&G, Fairbanks; personal communication).

In 1993, the BOF made a positive customary and traditional (C&T) uses finding for all salmon in the Yukon–Northern area. The ANS determination was established at 348,000–503,000 salmon for all species combined. Under these guidelines, 1992 marked the last year when total subsistence salmon harvests fell within the combined ANS range. Since 1990, the overall total subsistence salmon harvest in the Yukon area has declined by approximately 30%. In 2001, the BOF determined species-specific amounts of salmon necessary for subsistence. A species-specific ANS range provides one index of the extent to which reasonable opportunity was provided in each subsistence fishery. Harvests below the lower bound of the ANS range may indicate, with other evidence, that there was not a reasonable opportunity for subsistence harvests during the previous season. Harvests consistently lower than the lower bound of the ANS are an indication to the BOF to consider whether additional management actions are necessary to provide reasonable

<sup>14.</sup> Some District 6 users, specifically residents of the Fairbanks North Star Borough, may harvest salmon from the Yukon bridge permit area rather than from the Tanana River drainage.

subsistence opportunities. All species were within ANS ranges in 2007; 2005 and 2007 mark the only times this has happened since 2001 (and 1998, if species-specific ANS estimates are projected back to 1998). See Table 4-4 for a comparison of ANS ranges and recent years' subsistence salmon harvests.

#### Nonsalmon Fish Harvests

While salmon harvests dominate most of the regulatory actions in the Yukon Area, nonsalmon fish harvests remain significant components of the seasonal subsistence round for Yukon fishers. While salmon are only available seasonally, most nonsalmon species are available year-round. Nonsalmon fish figure into the subsistence way of life for Yukon Area residents in biologically, historically, and culturally significant ways. In 1987 and again in 1993, the BOF made a positive C&T finding for freshwater fish species in the Yukon Area, including sheefish, whitefish species, lamprey, burbot, suckers, Arctic grayling, northern pike, and Arctic char (see 5 AAC 01.236). Nonsalmon fishing is generally open by regulation 7 days per week, 24 hours per day, year-round. These state regulations also apply to subsistence fisheries on federal lands in the project study area (unless superseded on federal public lands by federal subsistence regulations, applicable only to federally qualified subsistence users). Under ANILCA, rural Alaskan residents of the Yukon-Northern Area (except those living in ADF&G Game Management Unit 26B) and residents of the Yukon River drainage have a customary and traditional uses determination for nonsalmon fish and are therefore qualified to participate in subsistence activities on federal public lands, even if other uses and/or users have been prohibited from subsistence fishing in federal waters due to conservation concerns or user conflicts (USFWS 2008).

ADF&G Division of Commercial Fisheries collects nonsalmon harvest data on an annual basis as part of their postseason salmon survey. However, it is important to keep in mind that collection of nonsalmon harvest data is not the primary purpose for the postseason salmon survey. Furthermore, the implementation of this postseason survey immediately following the salmon season may not be timed to produce the most reliable and accurate results for nonsalmon harvests, nor is the stratified sample of salmon fishing households necessarily the best design for collecting nonsalmon harvest information. Nonetheless, while other single-year harvest data collection efforts suggest that the postseason survey may significantly underestimate harvests (Andersen et al. 2004, Brown et al. 2005a), these data remain the only annual estimate of nonsalmon fish harvests in the Yukon Area (Table 4-5).

Table 4-2.—Estimated subsistence salmon harvests by community, Yukon Area, 2007.

	Househol	ds or permits	Estimated salmon harvest <sup>a</sup>						
		Surveyed or		Summer					
Community	Total	returned	Chinook	chum	Fall chum	Coho	Pink	Total	
Alakanuk	125	54	1,257	7,611	1,348	857	32	11,105	
Alatna	10	6	0	11	7	0	0	18	
Allakaket	38	36	53	3,451	939	66	0	4,509	
Anvik	34	29	1,321	5,250	429	807	0	7,807	
Beaver	29	19	1,244	41	354	354	0	1,993	
Bettles	24	11	0	0	0	0	0	0	
Birch Creek	18	6	113	0	0	0	0	113	
Central	10	10	334	0	0	0	0	334	
Chalkyitsik	30	22	0	0	213	0	0	213	
Circle	12	11	1,057	200	1,286	0	0	2,543	
Eagle	37	36	1,999	15	18,676	0	0	20,690	
Emmonak	156	89	2,326	9,256	2,360	1,032	51	15,025	
Fairbanks	280	260	3,031	958	5,606	770	0	10,365	
Fort Yukon	150	53	4,076	2,365	6,010	2,821	0	15,272	
Galena	148	44	2,511	571	1,471	425	0	4,978	
Grayling	48	14	1,500	641	317	271	0	2,729	
Healy	9	8	0	0	1,090	1,463	0	2,553	
Holy Cross	60	36	2,902	320	248	213	0	3,683	
Hooper Bay	196	63	430	12,234	64	26	113	12,867	
Hughes	29	18	8	1,213	0	100	0	1,321	
Huslia	69	30	146	3,243	272	592	0	4,253	
Kaltag	60	19	1,456	109	910	204	0	2,679	
Kotlik	98	43	1,569	5,017	530	284	129	7,529	
Koyukuk	35	23	811	995	927	189	0	2,922	
Manley Hot Springs	14	14	333	140	3,419	1,126	0	5,018	
Marshall	71	30	2,555	3,070	789	922	0	7,336	
Minto	39	36	82	82	155	155	0	474	
Mountain Village	146	61	2,077	8,104	1,073	1,027	87	12,368	
Nenana	36	35	899	1,429	21,863	4,487	0	28,678	
Nulato	86	30	2,431	356	1,345	130	0	4,262	
Nunam Iqua (Sheldon	35	24	907	2,325	152	92	170	3,646	
Point)		_,	, ,	2,020	102		2,0	2,010	
Pilot Station	102	46	2,028	3,711	741	263	0	6,743	
Pitka's Point	27	19	320	515	44	38	66	983	
Rampart	4	2	250	25	250	50	0	-575	
Ruby	57	22	1,594	416	1,959	168	0	4,137	
Russian Mission	57	19	1,301	759	530	259	3	2,852	
Saint Marys	127	59	3,573	8,107	825	97	32	12,634	
Scammon Bay	74	31	768	3,887	170	84	1,435	6,344	
Shageluk	41	18	448	977	147	267	0	1,839	
Stevens Village	31	25	610	254	199	0	0	1,063	
Tanana	99	48	5,498	5,229	21,596	2,369	0	34,692	
Venetie	49	19	1,002	107	721	2,309	0	1,830	
Other Communities	61	56	472	81	85	5	0	643	
Total	2,861	1,534	55,292	93,075	99,120	22,013	2,118	271,618	

Source ADF&G Division of Commercial Fisheries personal communication, preliminary report. Tables 1, 3, 7, and 11. Preliminary results as of February 27, 2009.

a. Includes subsistence harvests, personal use harvests, commercial harvests retained for home uses, and fish distributed from ADF&G test fisheries.

Table 4-3.—Historical subsistence salmon harvests, Yukon area, 1976–2007.

	Household	ds or permits <sup>a</sup>			Estimated salu	non harvest		
		Surveyed or	Summer					***************************************
Year	Total	returned	Chinook	chum	Fall chum	Coho	Pink	Total_
1976			17,530		1,375	12,737		31,642
1977			16,007		4,099	16,333		36,439
1978			30,785	213,953	95,532	7,965		348,235
1979			31,005	202,772	233,347	9,794		476,918
1980			42,724	274,883	172,657	20,158		510,422
1981			29,690	210,785	188,525	21,228		450,228
1982			28,158	260,969	132,897	35,894		457,918
1983			49,478	240,386	192,928	23,905		506,697
1984			42,428	230,747	174,823	49,020		497,018
1985			39,771	264,828	206,472	32,264		543,335
1986			45,238	290,825	164,043	34,468		534,574
1987			55,039	300,042	226,990	46,213		628,284
1988	2,700	1,865	45,495	229,838	157,075	69,679		502,087
1989	2,211	983	48,462	169,496	211,303	40,924		470,185
1990	2,666	1,121	48,587	115,609	167,900	43,460		375,556
1991	2,521	1,261	46,773	118,540	145,524	37,388		348,225
1992	2,751	1,281	47,077	142,192	107,808	51,980		349,057
1993	3,028	1,397	63,915	125,574	76,882	15,812		282,183
1994	2,922	1,386	53,902	124,807	123,565	41,775		344,049
1995	2,832	1,391	50,620	136,083	130,860	28,377		345,940
1996	2,869	1,293	45,671	124,738	129,258	30,404		330,071
1997	2,825	1,309	57,117	112,820	95,141	23,945		289,023
1998	2,986	1,337	54,124	87,366	62,901	18,121		222,512
1999	2,888	1,377	50,515	79,250	83,420	19,984		233,169
2000	3,209	1,341	36,844	77,813	19,402	16,650	1,591	152,300
2001	3,072	1,355	56,103	72,392	36,164	23,236	403	188,298
2002	2,775	1,254	44,384	87,599	20,140	16,551	8,425	177,100
2003	2,850	1,377	56,872	83,802	58,030	24,866	2,167	225,737
2004	2,721	1,228	57,549	79,411	64,562	25,286	9,697	236,506
2005	2,662	1,406	53,547	93,411	91,667	27,357	3,132	269,114
2006	2,833	1,473	48,682	115,355	84,320	19,985	4,854	273,196
2007	2,861	1,534	55,292	93,075	99,120	22,013	2,118	271,618
5-year average (2002–2006)	2,768	1,348	52,207	91,916	63,744	22,809	5,655	236,331
10-year average (1997–2006)	2,882	1,346	51,574	88,922	61,575	21,598	4,324	226,696
Historical average (1976–2006)	2,806	1,339	44,971	160,906	118,052	28,573	4,324	343,097

Source ADF&G Division of Commercial Fisheries personal communication, preliminary report. Tables 1, 3, 7, and 11. Preliminary results as of February 27, 2009.

a. Estimates prior to 1988 are based on fish camp surveys and sampling information is unavailable.

Table 4-4.—Comparison of amounts necessary for subsistence (ANS) and estimated subsistence salmon harvests, Yukon Area, 1998–2007.

	Chinook	Summer chum	Fall chum	Coho
ANS range	45,500–66,704	83,500–142,192	89,500–167,900	20,50051,980
Year		Estimated number of subs	sistence salmon harvested	ı
1998	52,910	<u>81,858</u>	59.603	16,606
1999	50,711	<u>79,348</u>	<u>84,203</u>	<u>20,122</u>
2000	<u>33,896</u>	<u>72,807</u>	<u>15,152</u>	<u>11.853</u>
2001	53,462	<u>68,544</u>	<u>32,135</u>	21,977
2002	<u>42,117</u>	<u>79,066</u>	<u>17,908</u>	<u>15,619</u>
2003	55,221	<u>78,664</u>	<u>53,829</u>	22,838
2004	55,102	<u>74.532</u>	<u>61,895</u>	24,190
2005	53,409	93,259	91,534	27,250
2006	48,593	115,093	83,987	<u> 19,706</u>
2007	55,156	92,891	98,947	21,878

Source ADF&G Division of Commercial Fisheries personal communication, preliminary

report. Appendices B1-B4. Preliminary results as of February 27, 2009.

a. Estimates for 1998-2004 do not include personal use harvests, ADF&G test fishery distributions, or salmon removed from commercial harvests. Estimates for 2005-2007 include test fishery distributions because the amounts necessary for subsistence (ANS) are based on harvests from 1990-1999 and included test fishery distribution.

**Bold underlined** cells indicate harvest amounts are below the minimum ANS.

Table 4-5.—Estimated subsistence harvest of nonsalmon fish by community, Yukon Area, 2007.

· · · · · · · · · · · · · · · · · · ·	Hous	seholds		Estima	ted nonsalmon	harvest	
			Large	Small			
Community	Total	Surveyed	Whitefisha	Whitefish	Pike	Sheefish	Total
Alakanuk	125	54	1,396	4,756	2,904	1,424	10,480
Alatna	10	6	0	0	0	6	6
Allakaket	38	36	1,372	1,115	234	582	3,303
Anvik	34	29	210	124	140	110	584
Beaver	29	19	37	6	107	11	161
Bettles	24	11	0	0	26	16	42
Birch Creek	18	6	257	0	141	131	529
Chalkyitsik	30	22	12	64	122	82	280
Emmonak	156	89	543	3,113	2,315	1,287	7,258
Fort Yukon	150	53	1,000	443	426	140	2,009
Galena	148	44	518	451	157	131	1,257
Grayling	48	14	552	274	308	519	1,653
Holy Cross	60	36	1,016	438	482	53	1,989
Hooper Bay	196	63	45	4,712	764	124	5,645
Hughes	29	18	941	10,586	309	245	12,081
Huslia	69	30	399	408	2,901	102	3,810
Kaltag	60	19	15	6	42	70	133
Kotlik	98	43	504	4,309	2,788	2,327	9,928
Koyukuk	35	23	78	19	231	134	462
Marshall	71	30	676	468	1,619	267	3,030
Mountain Village	146	60	1,895	2,370	2,321	1,094	7,680
Nulato	86	30	274	826	385	448	1,933
Nunam Iqua (Sheldon Point)	35	25	179	1,385	639	1,147	3,350
Pilot Station	102	45	1,379	1,184	638	721	3,922
Pitka's Point	27	19	132	655	111	104	1,002
Ruby	57	22	287	192	64	74	617
Russian Mission	57	19	463	389	715	143	1,710
Saint Marys	127	59	1,969	1,424	2,522	447	6,362
Scammon Bay	74	31	511	1,590	1,640	105	3,846
Shageluk	41	18	278	228	577	157	1,240
Stevens Village	31	25	61	11	61	39	172
Tanana	99	48	2,442	3,084	43	963	6,532
Venetie	49	19	267	0	215	0	482
Total	2,359	1,065	19,708	44,630	25,947	13,203	103,488

Source ADF&G Division of Commercial Fisheries personal communication, preliminary report. Table 11. Preliminary results as of February 27, 2009.

a. Large whitefish are considered those 4 lb or larger and small whitefish are <4 lb.

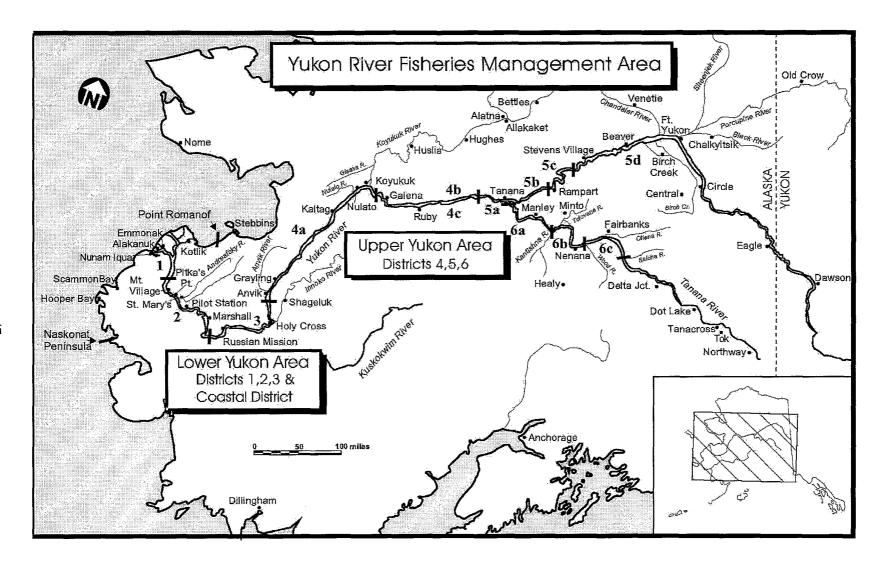


Figure 4-1.—Map of the Alaskan portion of the Yukon River drainage, showing communities and districts.

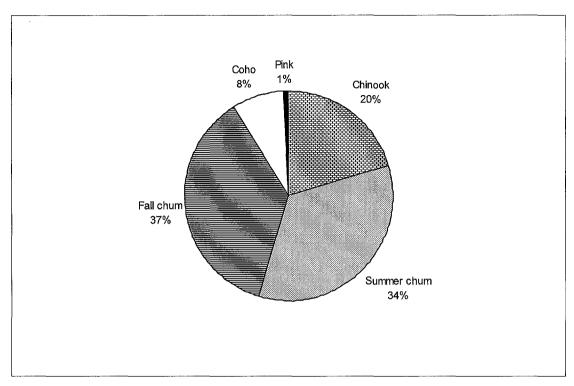


Figure 4-2.—Yukon area estimated subsistence salmon harvests, 2007.

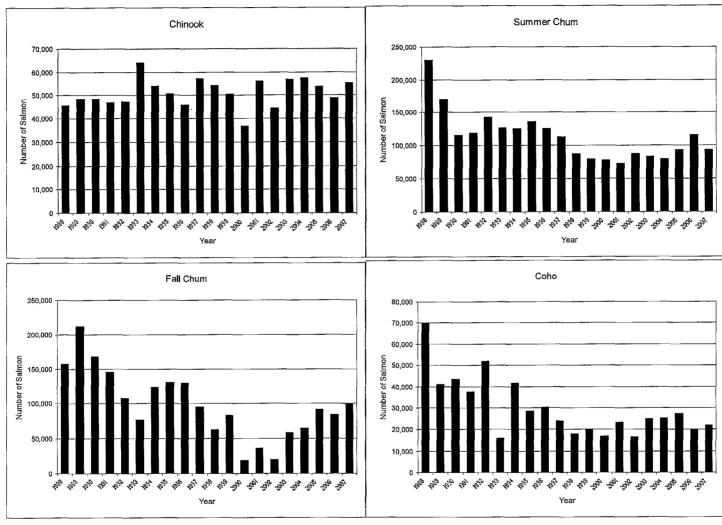


Figure 4-3.—Estimated subsistence salmon harvests by species, Yukon area, 1988–2007.

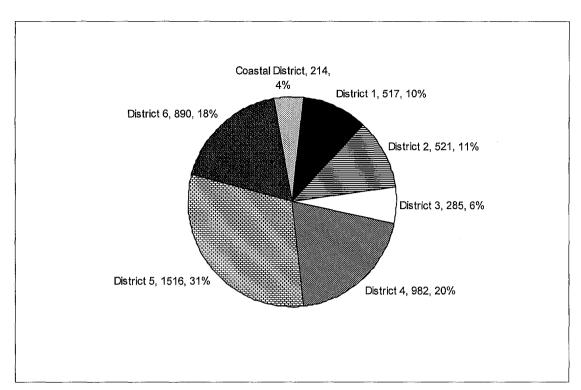


Figure 4-4.—Estimated number of dogs by district, Yukon Area, 2007.

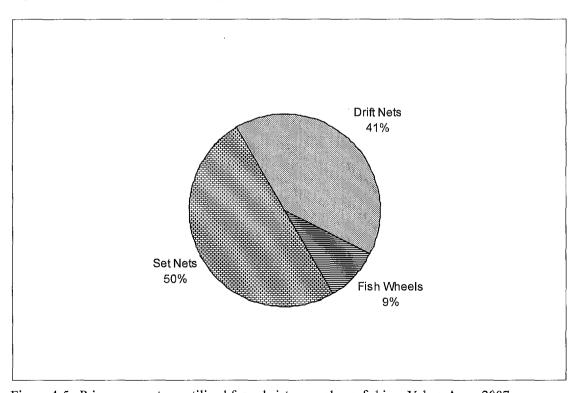


Figure 4-5.—Primary gear type utilized for subsistence salmon fishing, Yukon Area, 2007.

RC87

Francis Thompson P.O. Box 111 St. Mary's, Alaska 99658 amaar\_culi@yahoo.com

January 29, 2010

Board of Fisheries ADF&G P.O. Box 25526 Juneau, Alaska 99802

Mr. Chairman, Honorable Board of Fisheries Members:

I am supporting RC84 for the following reasons:

- 1. In 2009 it was agreed by the stakeholders to allow the first pulse of Chinook salmon to migrate up the river with no fishing pressure for 1 week.
- 2. In 2009 the fishing windows continued after the 1<sup>st</sup> pulse passed each fishing district.

These two simple actions allowed for the first time, immediate and noticeable results that met escapement goals in Alaska and meet and exceeded treaty obligations, providing for larger Chinook salmon to be harvested throughout the Yukon River drainage as stated by the upper river delegates in testimony.

My mother Marcia Thompson always tell her family to be respectful, mindful of others and offer help if needed. To resolve negative and confrontational issues in a respectful and least controversial and escalating manner because someday you may need their help.

Accepting the recommendations in RC 84 will not force a mandate to fishers, cost nothing for the State of Alaska to oversee. processors will be able to market salmon when a commercial fishery is allowed. This will not demand anything but the trust from the stakeholders to participate in this noble effort, it will allow for all the stakeholders to participate in the idea of conservation and most importantly it will achieve what the proponents of these proposals are pursuing.

Quyana Caknak: (Thank You Very Much)

Francis Thompson



Alaska Board of Fisheries Chair Vince Webster and members

January 29, 2010

#### Chair Webster,

I am writing to note the omission of the Northern Norton Sound Advisory Committee's consideration of the Management Action Plans in our minutes. We took no action on them since we were in support of them and the Department was presenting them as an informational item. Area Biologist Jim Menard presented both the Subdistrict 1 and Subdistrict 2 and 3 Plans to us and we had a brief discussion. With regard to the management of pink salmon in Subdistrict 2 and 3, we were in support of the plan to allow harvest of the pink salmon roughly one week earlier in order to fish the peak of abundance in the second quartile of the pink run. I hope that you can consider this in your deliberations on the subject.

Sincerely,

Charles Lean - vice Chair NNSAC

P(89

#### October 2-3, 2009 Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

Board of Fish Recommendations

Oppose proposals #88-97

Justification. These proposals very negatively affect Lower Yukon people, their economy, and their subsistence lifestyle. There are concerns about waste of fish/food (e.g. proposal 93); this is culturally inappropriate to our people and is wrong. There shouldn't be a reallocation from primary subsistence use to expand or create a "new" (roe) fishery for Fairbanks North Star Borough area. These would take from an area of least economic opportunity or alternatives and reallocate to area that already has a large diversity of opportunity/alternative.

Support without modification proposal #67

Justification. Kings are fully allocated for subsistence and escapement on the Kuskokwim. A directed king salmon commercial fishery on the Kuskokwim is not appropriate.



January 29, 2010

RE: RC-82 (below)

I have consulted with the other Kuskokwim representative (Jennifer Hooper - AVCP) who was on Committee B, and whose input on proposal #67 brought the determination of no consensus. They found this compromise language entirely acceptable, with the understanding that subsistence use is not affected. So with all involved parties in agreement, the amendment proposed in RC-82 does have consensus.

RC-82 BOF

January 28, 2010
To: Board of Fisheries
From: Crag Boarieke

From: Greg Roczicka

I would like to offer an amendment to proposal #67:

The proposal as written completely repeals the use of 8 inch gear in the Kuskokwim commercial fishery.

The amendment would be to insert language so 5 AAC 07.331(c) would now read "In Districts 1 & 2 salmon may be taken only with gillnets with six inch or smaller mesh, except that in District 1, <u>after July 1st</u>, the commissioner may open fishing periods during which the gillnet mesh size may be no greater than eight inches."

This change would alleviate any concerns for a directed Chinook harvest targeting on the large spawners during the bulk of the run, while still allowing the Department to have the 8 inch gear as a management tool during the peak of the sockeye and chum runs which was stated as their only foreseeable use of the 8 inch option. For practical management purposes this represents a good compromise for all involved. I have spoken with Department staff regarding this change and they have no objections.

PC 91

1/30/2010

#### **Recommendations for Final Board Deliberation**

Dear Board of Fisheries,

Thank you for your hard work and I will try to keep recommendations very short and simple.

### Concerning Proposals 88, 89, 90 and 92 (driftnet, net mesh and depth and by catch issue)

Supported by the Tanana Rampart Manley Advisory Committee (TRM), Eastern Interior Regional Advisory Council, Fairbanks Advisory Committee, Minto Nenana Advisory Committee. Note — original proposers of the four proposals.

- As negotiations on these proposals feel through at end of meeting on Thursday we have no other course to take but to recommend passage as submitted.
- Any net reduction should include language that the use of tangle nets or nets with a depth to width ratio of more than 2 to 1 be not allowed.
- Want to stress proposal section "List any other solutions you considered and why you rejected them" relative to the 6" mesh proposal.

[Nets in the 7" range were considered in past Board cycles however a number of reasons were discovered why they were not suitable.

- 1. A USFWS study (An Investigation of the Potential Effects of Selective Exploitation on the Demography and Productivity of Yukon River Chinook Salmon, Bromaghin, Nielson, and Hard) showed 7.5" mesh to be ineffective at reversing declining size trends and can actually contribute to the problem. This study also mirrors the recommendation of ADF&G report to the Board of Fisheries in January 1981 (Fairbanks AC comment #3 in Board book.
- 2. Current ongoing mesh size studies by ADF&G and anecdotal info from fishermen river wide show nets of the 7" range actually catching more fish and more lbs of Chinook than the more normally used 8-9" nets and the smaller 6" range nets. Fishermen in the upper river commonly are reporting most Chinook going through the larger nets. This is clearly because of the lack of the larger fish at present. Targeting the next available largest Chinook age class with 7" range nets will only further damage the run. Proposers feel it would be best at this point to leave the mesh size at unlimited (commonly 8-9") if the 6" is not approved by Board.]

#### Concerning Proposal 94 (Windows or 1st Pulse Protection)

Supported by Tanana Rampart Manley AC, Eastern Interior Regional AC, Fairbanks AC, Eagle AC. Note – as Board is aware this changed and compromised on proposal was also supported openly by many other groups of whom I was not able to get a final decision.

- We approve the wording read to the Board openly by Andy Bassich of the Eagle AC towards end of Thursday's meeting which required these key points:
  - 1. To be put in regulation and not left up to Dept discretion.
  - 2. If 1<sup>st</sup> pulse not identified in time to protect that second pulse be protected.
  - 3. "True 2001 type" windows be run to midpoint of run
  - 4. Commercial not opened till midpoint of run

5. Present windows schedule starts at ice out.

#### **Concerning Possible Fishwheel Restrictions**

<u>Supported by Stan Zuray, Eastern Interior Regional AC and Fairbanks AC. Note – believe Tanana Rampart Manley AC</u> and other AC's may support but cannot speak for issue without a meeting.

- If restrictions of 6" mesh and 15' depth limit are placed on net gear fishwheels could be limited to a "dip" or amount of basket in the water of 15' also.
- This would require running some of the larger wheels on the river in a slightly raised position from there maximum ability but would not require any rebuilding of any present wheels. It would make unusable some of the real large wheels of the past. It would be easily enforced.

### Concerning Proposal 95, 96, 97 (king, summer and fall chum quota reallocation)

Supported by Tanana Rampart Manley AC, Eastern Interior Regional AC, Fairbanks AC, Minto Nenana Advisory Committee. Note: a number of other persons and some AC's expressed support for this fairness proposal during public testimony but was unable to contact after end of meeting Thursday.

- Quotas were decided on in a very political or unfair environment. Arrived at by hard lobbying by select groups they are clearly beyond unfair.
  - Does not increase any harvest on any stocks and is simply allocative.
- The extremely high percent of the quota that is allocated to districts 1 and 2 requires managers to prosecute the commercial fishery prior to a valid assessment of the run strength. An example of this is 7 commercial openings for fall chum in 2009 in districts 1 and 2, then the realization that the numbers past Pilot Sonar was the lowest on record. Then what happened was no commercial openings in district 4 and 5 and severe inability to meet even basic subsistence needs.
- Upper river do not have other fisheries they can participate in unlike the lower river (ie CDQ group Bering Sea fishery).
  - Disagree with those who say markets are not possible for allocated fish.
- Stan Zuray only comment "if Board does not feel comfortable with full requests of allocation at this time I'd request at least a partial allocation as a recognition of fairness to other sections of the river that they were clearly not considered when these quota's were given out.

## Concerning - opposed to changes to King, summer chum fall chum and coho management plans, 94, 193, 194, 195

Supported by Tanana Rampart Manley AC, Eastern Interior Regional AC, Fairbanks AC, and Eagle AC, Minto Nenana Advisory Committee. Note — also supported by numerous other AC's during testimony which I haven't been able to talk to. Opposition was also unanimously supported by YRDFA in Nov. 2009.

- Because of the tremendous amount of cooperative work by YRDFA, ADF&G and other groups on all these plans over many years it seems wrong to accept changes lobbied for by a single group, especially when concerns are present over changes.
- -This is a future job for a group such as YRDFA where all river groups have an equal say and consensus is the priority. Not something to be decided on without all AC's and groups not having had time to comment on.

Above supporters have submitted the following backup comments to the Board:

RC 5

RC 28,

RC 66

RC 69

Again thank you for working for us all.

Point of contact and support and comments assembled by Stan Zuray

PROPOSAL A - 5 AAC 99.0XX. Board of Fisheries subsistence finding standards.

Add a new section in 5 AAC 99 as follows:

**5 AAC 99.0XX. Board of Fisheries subsistence finding standards.** In the identification by the Board of Fisheries of fish stocks or portions of fish stocks that are customarily and traditionally taken or used by Alaska residents for subsistence uses under 5 AAC 99.010(b), "subsistence way of life" means a way of life that is based on consistent, long-term reliance upon the fish and game resources for the basic necessities of life.

**ISSUE:** This proposal is generated in response to the Decision and Order from the state superior court in Fairbanks in the case of *Alaska Fish and Wildlife Conservation Fund v. State of Alaska, Board of Fisheries*, Case No. 4FA-09-1515 Civil (Alaska Super. Ct. December 31, 2009). That case challenged the Board's findings for customary and traditional use of salmon in the Chitina Subdistrict. The court ruled, in part:

because the board failed to properly articulate the standard being applied with regard to criterion eight of 5 AAC 99.010(b), this case is remanded to the board with instructions to 1) define the term "subsistence way of life" as used in 5 AAC 99.010(b)(8) using an objective standard supported by law; 2) provide the plaintiffs with an opportunity to supplement the record in light of that definition; and 3) re-apply 5 AAC 99.010(b) consistent with that definition and in light of the supplemented record.

Decision and Order at 34. In the same decision, the Court, in upholding the validity of 5 AAC 99.010(b)(8), also ruled that the Board could properly apply that criterion as follows:

The statutes and common law of Alaska provide ample guidance in determining what standard should apply when evaluating subsistence activity or a subsistence way of life. The board can turn to this law when determining the meaning of the term "subsistence way of life."

When determining whether a stock is used as part of a subsistence way of life the board can look for a way of life that includes the noncommercial, long-term, and consistent taking of, use of, and reliance upon fish for direct personal or family consumption as food or for customary trade, barter, or sharing for personal or family consumption. The board can look to see that the taking and use reflects the cultural, social, spiritual and nutritional values embodied in subsistence laws. The board can look to see if the taking and use is relied upon for the basic necessities of life. There is sufficient guidance in the law to give meaning to this criterion.

Decision and Order at 17. This proposal is designed and intended by the Board to comply with the Court's order and guidance in articulating a standard for application of the term "subsistence way of life" in 5 AAC 99.010(b)(8) by capturing the gist of the court's guidance on this subject. With adoption of this proposal, the Board's interpretation of 5 AAC 99.010(b)(8) would flow as follows:

#### a pattern

- that includes taking, use, and reliance for subsistence purposes upon a wide diversity of fish and game resources and
- that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life (a way of life that is based on consistent, long-term reliance upon the fish and game resources for the basic necessities of life).

WHAT WILL HAPPEN IF NOTHING IS DONE? The Board will be out of compliance with the superior court's order and directions.

WHO IS LIKELY TO BENEFIT? The Board and the public in general because there will be an articulated standard for application by the Board and for those who wish to submit comments and information for the Board's consideration relative to 5 AAC 99.010(b)(8).

#### WHO IS LIKELY TO SUFFER? No one.

OTHER SOLUTIONS CONSIDERED? Submission of the proposal to the Joint Boards of Fisheries and Game, which is an option that could be considered for the future, but is not legally required because, although 5 AAC 99.010 is a Joint Board regulation, it is not required to be and this proposal does not amend 5 AAC 99.010(b), which the court found to be legally valid in every respect. Also, there is no provision in the current budget for a joint board meeting this year.

**PROPOSED BY:** Alaska Board of Fisheries.

# PROPOSAL B - 5 AAC 01.616. Customary and traditional subsistence uses of fish stocks and amount necessary for subsistence uses.

This proposal would allow the Board to decide whether to amend 5 AAC 01.616 as follows:

(a) The Alaska Board of Fisheries (board) finds that salmon stocks are customarily and traditionally taken or used for subsistence in the following locations:

# (7) the Chitina Subdistrict of the Upper Copper River District described in 5 AAC 01.605(1).

(b) The board finds that the following amounts of salmon are reasonably necessary for subsistence uses in the following locations:

# (6) Chitina Subdistrict of the Upper Copper River District: 100,000 – 150,000 salmon.

If the Board finds in the affirmative on these issues, then other regulations currently in the personal use fishing chapter dealing with the manner of fishing for salmon in the Chitina Subdistrict would also need to be incorporated as subsistence regulations.

**ISSUE:** In the Decision and Order from the state superior court in Fairbanks in the case of *Alaska Fish and Wildlife Conservation Fund v. State of Alaska, Board of Fisheries*, Case No. 4FA-09-1515 Civil (Alaska Super. Ct. December 31, 2009), which involved a challenge to the Board's findings for customary and traditional use of salmon in the Chitina Subdistrict, the court ruled, in part:

because the board failed to properly articulate the standard being applied with regard to criterion eight of 5 AAC 99.010(b), this case is remanded to the board with instructions to 1) define the term "subsistence way of life" as used in 5 AAC 99.010(b)(8) using an objective standard supported by law; 2) provide the plaintiffs with an opportunity to supplement the record in light of that definition; and 3) re-apply 5 AAC 99.010(b) consistent with that definition and in light of the supplemented record.

Decision and Order at 34. This proposal is intended to allow the Board to comply with the Court's order to re-apply 5 AAC 99.010, under the standards proposed in the companion Proposal A, also being generated by the Board at this time.

WHAT WILL HAPPEN IF NOTHING IS DONE? The Board will be out of compliance with the superior court's order and directions.

WHO IS LIKELY TO BENEFIT? The Board and the public in having a C&T determination on Chitina Subdistrict salmon consistent with the court decision.

WHO IS LIKELY TO SUFFER? No one.

OTHER SOLUTIONS CONSIDERED? None.

PROPOSED BY: Alaska Board of Fisheries.

REF to Prop 94 Require windows during commercial openings Lower River

Agreed to by Representatives of: Eagle AC, Nenana/Mito AC, EIRAC, WIRAC, Fairbanks AC, FT Yukon. Tanana/ Rampart AC, Ruby AC

1st Pulse Protection Action (PPA) to be in place by regulation

From Ice out until 1st pulse, current fishing periods will be in place.

Commercial harvest will begin at the mid point in the run if surplus fish are available above subsistence and escapement needs.

The Dept shall protect the  $1^{st}$  Chinook pulse up river from the mouth to the Canadian Border from all fishing effort, by tight tracking and Stat Area closures to ensure that little or no harvest is prosecuted on this  $1^{st}$  pulse.

If the Dept misses the  $1^{st}$  pulse the full measure of PPA protection shall be prosecuted on the  $2^{nd}$  pulse.

The PPA shall be prosecuted every year regardless of projected run strength.

This is a conservation measure to insure Quality escapement of Canadian bound Chinook, further this PPA will provide for a consistent conservation practice to be established, and allow for Fishers to have a year, by year consistent pattern of Fishing early in the run.

This will improve the Full Representation of all age classes to the spawning grounds as seen at the mouth of the Yukon River, which will ensure balanced genetic contributions to the Escapement. This is the primary goal to reverse current decline in Yukon River stock abundance, and is essential in the rebuilding efforts of Yukon River Chinook salmon.

This proposal is the most effective and equitable conservation tool available to the Board, which has river wide user agreement and support.

REF Prop 86 Tie up set nets

Supported by Eagle AC, Ft Yukon AC, EIRAC

This prop is intended as a safety measure for fisher Women in 5YD ft Yukon to Eagle. All fishers in this area have a good working relationship with both NPS and FWS and are few in number. Fishers in Eagle area are closely located within 9 miles, 1 mile below Present ADF&G Sonar Camp.

These net sites are Easily observed during closure locally by NPS or FWS boats with no Fly over component require for closure enforcement. This regulation could be limited to Within 10 river miles around Eagle, and 20 river miles around FT Yukon.

During closers a black buoy could be attached in addition to anchor float to indicate net is tied up. Further, mesh shall be required to be tied up and secure so that no mesh extends more than 10" into the water column (every 4 feet) fishers would be held accountable to insure that gear is properly secure to shore, and does not have the ability to catch fish in any manner. Failure to do so would constitute citations for Illegal fishing

A great amount of effort has gone into creating better Stewart ship by fishers in our area, and to foster a Strong conservation mind set for Yukon River Salmon. This proposal will provide for fisher women, and single-handed fishers to continue in a declining and important Traditional cultural practice in a safe manner.

#### Ref to Proposal 90 } 89

Agreed to by Eagle AC, Tanana Rampart Manley AC, Fairbanks AC, EIRAC, Minto/Nenana AC, Fort Yukon,

Fish wheel Depth Restrictions

All fish wheels on the Yukon River may be limited to a 15 foot depth of fishing. Defined as ("from Water line to bottom of the river. 15 foot)

If mesh restriction are imposed River wide to less than 7" mesh, we feel that a equitable restriction to Fish wheel gear could include the above restriction.

Fish wheels tend to be Bias to the harvest of small fish in the upper river (fish are very bank oriented), and tend to harvest all age classed and size of fish from small white fish and shee fish to larger Chinook salmon.

I an effort to protect larger more fecund fish the above restriction could have a positive effect

Written Testimony of Jeremy Charlie, voted to represent Minto-Nenana AC at their October 2009 meeting

The Minto-Nenana AC Advisory Committee would like to support **proposals 63-65**, with an amendment to **proposal 64**.

The amendment to **proposal 64** would change the limit in the winter Minto pike fishery from 25 pike per day, with 50 in possession to 10 per day, 20 in possession. Our reasoning behind this is we do not think that there is a need for such liberal numbers

Regarding **Proposal 83**, we support the catch calendars because we feel it is important to have an accurate report for salmon n the Yukon.

We support **proposals 88-90** because we feel it would help in conservation if Chinook salmon with these measures in place it would preserve future stocks and allow a higher escapement into Canada

The Minto-Nenana AC did not support **Proposal 91** because we felt it is not good to allow people to harvest Chinook during Chum season. This seems to be contrary to the actions taken to cut back by-catch in the Pollock industry.

The Minto-Nenana AC also supported **Proposal 92** because we feel it is not a measure of good stewardship to sell kings during non-king fisheries

**Proposal 100** was supported because of the small number of Coho in the Tok River

The main reason the Minto-Nenana AC co-authored Proposals 88-90 was to create discussion about this. We want to see people start to take a conservative approach to fishing and management. We want there to be King salmon 1000 years from now-

JY SK COC

#### Materials Relating to Holitna River Reserve

Notes from 2007 BOF Committee B meeting regarding the Holitna River Basin Fisheries Reserve Proposal 157

RC #58

COMMITTEE B - Kuskokwim, Kotzebue and Norton Sound-Port Clarence Areas Salmon & Herring.

February 2007

#### Board Committee Members:

- 1. John Jensen, \*Chair
- 2. Art Nelson (Recused from Kuskokwim proposals)
- 3. Robert Heyano

## Alaska Department of Fish and Game Staff Members:

- 1. Patti Nelson
- 2. Gene Sandone
- 3. Dan Bergstrom
- 4. Tom Taube
- 5. Jim Menard
- Scott Kent 6.
- Jason Pawluk
- John Linderman
- Gary Todd
- 10. Eric Volk
- 11. Doug Molyneaux
- 12. Tracie Krauthoefer
- 13. Elizabeth Andrews
- 14. John Chythlook
- 15. Matthew Evenson
- 16. Jim Simon
- 17. Jim Magdanz
- 18. Brendan Scanlon
- 19. Don Roach

- Advisory Committee Members: 1. Myron Savetilik, Southern Norton Sound AC
  - 1. Myster Lean, Northern Norton Sound AC, Norton Sound Economic Development 2. Charles Lean, Northern Norton Sound AC, Norton Sound Economic Development Corporation
  - 3. James Charles, Lower Kuskokwim AC

Set nets are not as effective as drift nets in targeting salmon. There are two reasons for this:

1. Set nets are stationary and rely on a larger mesh than in the drift net fishery, allowing for salmon to slide into the webbing and be caught around the gills. On the other hand, drift nets are moving with the current and meet the salmon moving upriver. The two forces coming together allow for salmon to be caught with a smaller mesh in the drift fishery.

2. The second factor that leads to set nets being not as effective as drift nets is that when set at the coast, the webbing on a set net will float with the ebb of the tide, allowing all salmon to pass beneath.

Because of these reasons, fishermen who utilize set nets on the coast in District Y-1 request the following from the Board of Fish

#### IF A MAXIMUM MESH SIZE RESTRICTION OF 7.5" STRETCH MESH IS ADOPTED:

- 1. Establish a set net only area in the summer Chinook fishery patterned after the fall chum salmon setnet only area currently in regulation
- 2. Allow for a maximum mesh size of 8.0" stretch mesh in the set net fishery.
- 3. Direct ADF&G to manage the set net only areas to allow fishing on the flood of the incoming tide, similar to the management of the fall season.

Submitted by: Ragnar Alstrom representing the Lower Yukon Area Set Net Fishermen

Fishing gear and casese Fisherman to buy new Fish Permits to Y-1 From Y-2-93 it will cause Problems on the mouth of the Yukon they will plug the Mouth of the Yukon they will plug the Mouth of the Yukon and no Fish will go nother yeston

Proposal 49 - will Cause Fisherman to go bankrupt thy will need to buy new Nets-Anchors, Anchor Lines it will cause hardship for ALL subisistence and commercial Fisherman.

Proposal 90- will cause Bubisistance-Commercial Fisherman to go broke because they will have to buy new Fish gerr

# roposal 9/2 need to increase the harvest of King salmon above

proposal 92 no pass

Proposal 93. not allowed to waste Fish for human comsumption Proposal 95- need to incresse Allocation of Fish For ALL Districts
Proposal 97 need to incresse Allocation of Fish 8m ALL Districts
Proposal 98 need to open between BLK RUR and Chaispoint because
Poposal 98 need to open between BLK RUR and Chaispoint because
of no room for BLK Rue Fisherman
of no room for BLK Rue Fisherman
the no contest for any Fish in the Autreassky River.

White no contest for any Fish in the Autreassky River.

# CITY\_OF\_CORDOVA



January 27, 2010

RC 101

Alaska Department of Fish & Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

Dear members of the Board of Fisheries:

It has been brought to our attention that the Board of Fisheries may generate a proposal revisiting the classification of the Chitina personal use fishery during the Statewide Finfish meeting in March, and I am writing to request that the Board hold a meeting in Cordova prior to that time to hear testimony from Cordova citizens.

Cordova accounts for the majority of the fish caught and landed in Prince William Sound and accounts for a major portion of the wild stocks statewide. Given that Cordova's economy relies on healthy king and red salmon returns each spring, and given that Cordovans bear the greatest risk of the Board's decision in this matter, it is important that all residents of Cordova are given a reasonable opportunity to testify. The short time frame, distance and expense of traveling to Anchorage place unreasonable burdens on the residents of Cordova and do not provide an equitable opportunity for community members to share their viewpoints and positions on this matter.

Holding a special meeting in Cordova prior to the Statewide Finfish meeting will allow fishermen, business owners, students and families the opportunity to testify on this matter, a matter that has huge impacts on our community and lifestyle.

Thank you for your consideration.

Sincerely,

Timothy L. Joyce, Mayor

TLJ:lk

110 Nicholoff Way P.O. Box 1388 Cordova, Alaska 99574-1388 P (907) 424-7738 \* F (907) 424-7739 www.nveyak.org



10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, & the Gulf of Alaska

Vince Webster, Chairman Alaska Board of Fisheries Board Support Section PO Box 115526 Juneau, AK 99811-5526

January 28, 2010

Dear Chairman Webster,

I am writing on behalf of the Native Village of Eyak to request that a special meeting of the Board be held in Cordova to take testimony on the classification of the Chitina Personal Use Fishery.

We have heard that this matter will once again be taken up by the Board. Given the magnitude of this topic, its recurrence and the significance, it is important that all residents of our community are given the opportunity to testify.

The short time frame, distance and expense of traveling to Anchorage provide unreasonable burdens on the residents of Cordova, and does not provide an equitable opportunity for community members to share their viewpoints and positions on this matter that so significantly affects our lives.

The Native Village of Eyak formally requests that the Board of Fisheries hold a special meeting in Cordova to address this issue and listen to testimony and comments from our community. That way the people who are most affected by this decision will have an opportunity to participate

Your consideration of this request is appreciated. If you have any questions, please call me at (907) 424-7738.

Sincerely,

NATIVE VILLAGE OF EYAK TRADITIONAL COUNCIL

Robert Henrichs, President



#### Cordova District Fishermen United

PO Box 939 | 509 First Street | Cordova, AK 99574 phone. (907) 424 3447 | fax. (907) 424 3430 web. www.cdfu.org | email.cdfu@ak.net

RC 103

January 27, 2010

ALASKA DEPARTMENT OF FISH AND GAME Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

Dear members of the Board of Fisheries.

I am writing on behalf of the Cordova District Fishermen United Board of Directors to make a special request to the Alaska Board of Fisheries.

It has been brought to our attention that the Board of Fisheries may generate a proposal revisiting the classification of the Chitina personal use fishery during the Statewide Finfish meeting in March.

Given the magnitude of this topic, its recurrence and the significance to our commercial fishing industry and community of Cordova, it is important that all residents of Cordova are given the opportunity to testify. The short time frame, distance and expense of traveling to Anchorage provide unreasonable burdens on the residents of Cordova, and does not provide an adultable opportunity for community members to share their viewpoints and positions on this matter.

I would like to recommend that the Board of Fisheries consider holding a special meeting in Cordova, prior to the Statewide Finfish meeting where testimony will be taken for the record in this decision. This would provide many Cordova residents, fishermen, business owners, students and families the opportunity to comment and weigh in on this very important matter.

Your consideration of this request is appreciated. Please contact me if you would like additional information or to coordinate a meeting in Cordova - (907) 424-3447.

Sincerely,

Rochelle van den Broek

Executive Director

### Copper River/Prince William Sound Advisory Committee

P.O. Box 1558 • Cordova, Alaska 99574

AC 104

January 28, 2010

To: Vince Webster, Chair, Alaska Board of Fisheries

Fr: Tom Carpenter, Chair, Copper River/PWS Advisory

Committee

If the Board of Fisheries schedules reconsideration of the 2003 classification of the Chitna Subdistrict Personal Use fishery for the March Statewide Finfish meeting in Anchorage, the local Advisory Committee members strongly request the Board hold a public hearing in Cordova prior to the March meeting.

As you are aware, this issue is of great importance to all river users. For especially communities not on the road system, coming to Anchorage in March will present a considerable travel cost burden. In addition, the Board members would gain considerable valuable perspective from as many of the interested public as possible.

We stand ready to assist in any way in making the Board welcome in Cordova, and we look forward to your support of this request.

1/28/10

RC 105

#### Alaska Board of Fisheries Arctic-Yukon-Kuskokwim Finfish January 26-31, 2010

## **COMMITTEE B: Kuskokwim, Kotzebue and Norton Sound-Port Clarence Areas Salmon and Herring:**

Board committee members; Jensen (chair), Brown, Johnstone

#### Federal staff:

- 1. Rod Campbell US Fish & Wildlife Service/Office of Subsistence Management (USFWS-OSM)
- 2. Dave Mills National Park Service (NPS)

Complete Federal comments are located at Public Comments: PC- & Record Comments: RC- 18 (maps)

NPS-PC-9

#### **Kuskokwim Sport:**

Proposal 66. No comments.

#### **Kuskokwim Commercial**

**Proposal 67** requests that in Districts 1 and 2 of the Kuskokwim Management Area, salmon may be taken only with gillnets with six-inch or smaller mesh size.

**OSM Position:** Support. If adopted, this proposal could have an effect on Federally qualified subsistence users, depending on specific ADF&G management actions, by potentially increasing the number of larger Chinook salmon available for escapement, thereby improving the quality of escapements and harvest by upriver Federally qualified subsistence users.

#### Kuskokwim Area Subsistence

**Proposal 68** requests to expand hook and line use for the subsistence take of fish other than salmon in State waters from Wales to Point Hope, and include rod and reel as a legal subsistence gear type in that area. However, the proponent states the issue also includes rod and reel as lawful gear for taking salmon [5 AAC 01.120(a)].

**OSM Position:** Support with modification to include rod and reel as a legal subsistence gear type for the take of fish, including salmon. Adoption of this proposal, with modification as noted, would align Federal and State subsistence fishing regulations regarding the use of rod and reel in this area, minimizing or eliminating unintentional violations.

#### Norton Sound Stocks of Concern

- Subdistrict 1 chum salmon yield concern
- Subdistricts 2 and 3 chum salmon yield concern
- Subdistricts 5 and 6 Chinook salmon yield concern

#### Norton Sound-Port Clarence Area-Subsistence

**Proposal 69.** This proposal would expand the use of hook and line as a subsistence gear type for all of Norton Sound, except the Unalakleet Drainage. However, the proponent further states that the issue includes making rod and reel a legal subsistence gear type in this area.

**OSM Position:** Support with modification to include rod and reel as a legal subsistence gear type in the expanded area. Adoption of this proposal, with modification as noted, would align Federal and State subsistence fishing regulations regarding the use of rod and reel in this area, reducing confusion and minimizing or eliminating unintentional violations.

Proposals 70-71. No comments.

**Proposal 72** requests a review of the Unalakleet Chinook (king) salmon management plan and a modification to allow, by emergency order, a gillnet mesh size no greater than seven inches.

**OSM Position:** Support. Despite prior conservative management actions, Unalakleet River Chinook salmon remain a stock of yield concern. Adoption of this proposal would provide ADF&G managers more flexibility, by allowing them to restrict, by emergency order, mesh size to seven inches or less, to target smaller Chinook salmon while providing increased opportunity for the larger, more fecund (usually female) Chinook salmon to reach the spawning grounds.

Norton Sound-Port Clarence Area-Commercial

Proposals 73-79. No comments.

Norton Sound-Port Clarence Area-Sport Proposal 80. No comments.

# Fm Fbx, TaRM, Minto/Newmer East A/Co RC 106



Yukon Delta Fisheries Development Association RCIDIO

1016 West Sixth Avenue • Suite 301 • Anchorage • AK 99501 Tel: (907) 644-0326 Fax: (907) 644-0327

There are no state or federal regulations that interpret these sections of the MSA or provide guidance as to the definition of terms contained therein, most particularly the term "investments". Nor are there any state or federal regulations regarding the form or content of the required statement including whether it requires any supporting information. Therefore, in the absence of other guidance, we make this statement defining an "investment" as expenditures made with the objective of future financial returns, whether or not those endeavors yield gains or losses.

Please be advised that YDFDA only made investments in 2008 consistent with the provisions of 305(i)(1)(E)(iv) of the MSA.

Please see attached YDFDA Resolution 2009-02 showing approval of this statement by YDFDA's Board of Directors.

Thank you very much and please call if you have any questions.

#### YUKON DELTA FISHERIES DEVELOPMENT **ASSOCIATION**

<sup>&</sup>quot;(A) IN GENERAL.-There is established the western Alaska community development quota program in order-"i to provide eligible western Alaska villages with the opportunity to participate and invest in fisheries in the Bering Sea and Aleutian Islands Management Area;

<sup>&</sup>quot;(ii) to support economic development in western Alaska;

<sup>(</sup>iii) to alleviate poverty and provide economic and social benefits for residents of western Alaska; and

<sup>&</sup>quot;(iv) to achieve sustainable and diversified local economies in western Alaska.

Attachment 1: 2003 - 2005 Community Development Quota Allocations for Groundfish, Halibut, Crab and Prohibited Species

Allocations for Ground	111311, 1			illa Pioli.		pecies
Species or Species Group				pment Quota		
	APICDA	BBEDC	CBSFA	CVRF	NSEDC /	YDFDA
Groundfish CDQ Species						
Bering Sea (BS) Pollock	14%	21%	5%	24%	22%	14%
Aleutian Islands (AI) Pollock	14%	21%	5%	24%	22%	148
Bogoslof Pollock	. 14%	21%	5%	24%	22%	148
Pacific Cod	15%	21%	9%	18%	18%	1.98
BS Fixed Gear Sablefish	15%	20%	16%	. 0%	18%	31%
AI Fixed Gear Sablefish	14%	19%	3%	27%	23%	148
BS Sablefish	21%	22%	98	13%	13%	228
AI Sablefish	26%	20%	8%	1.3%	12%	218
WAI Atka Mackerel	30%	15%	8%	15%	14%	188
CAI Atka Mackerel	30%	15%	8%	15%	14%	1.8%
EAI/BS Atka Mackerel	30%	15%	8%	15%	14%	189
Yellowfin Sole	28%	24%	88	6%	7%	278
Rock Sole	24%	23%	88	1.1%	11%	238
BS Greenland Turbot	16%	20%	8%	17%	19%	20%
AI Greenland Turbot	1.7%	198	7%	18%	20%	198
Arrowtooth Flounder	22%	22%	98	13%	12%	229
Flathead Sole	20%	21%	9%	15%	15%	209
Alaska Plaice	14%	21%	5%	` 24%	22%	149
Other Flatfish	26%	24%	8%	. 8%	8%	269
BS Pacific Ocean Perch	17%	21%	6%	21%	19%	169
WAI Pacific Ocean Perch	30%	15%	8%		14%	189
CAI Pacific Ocean Perch	30%	15%	8%		14%	188
EAI Pacific Ocean Perch	30%	15%			<del></del>	188
BS Northern Rockfish				to CDQ grou	·	
BS Shortraker/Rougheye Rockfish				to CDQ grou	· · · · · · · · · · · · · · · · · · ·	
AI Northern Rockfish	30%	15%			r	189
AI Shortraker/Rougheye Rockfish	22%	17%		<del></del>		199
BS Other Rockfish	21%	19%	7%			199
AI Other Rockfish	21%	18%	88			199
Other Species	18%	21%	9%			209
Prohibited Species						
Zone 1 Red King Crab	24%	21%	8%	12%	12%	239
Zone 1 Bairdi Tanner Crab	26%	21%	8%		<del>                                     </del>	26
	24%	23%				24
Zone 2 Bairdi Tanner Crab	25%	24%				25
Opilio Tanner Crab	22%	22%				23
Pacific Halibut	14%	21%		<del> </del>		14
Chinook Salmon			<del></del>	<del>                                     </del>	<del> </del>	
Non-chinook Salmon	148	21%	38	24%	228	14
Halibut CDQ	7.000					
Halibut Area 4B	100%			<del></del>		0:
Halibut Area 4C	15%					0:
Halibut Area 4D	0%		<del></del>			20
Halibut Area 4E	0%	30%	0%	70%	0%	0
Crab CDQ	-	<b> </b>	ļ	<del> </del>		
Bristol Bay Red King Crab	17%				· · · · · · · · · · · · · · · · · · ·	18
Norton Sound Red King Crab	0%					50
Pribilof Red & Blue King Crab	0%	0%	100%	0%		0
St. Matthew Blue King Crab	50%	12%	0%	12%	14%	12
Bering Sea C. Opilio Crab	8%	20%	20%	178	18%	17
Bering Sea C. Bairdi Crab	10%					17

<sup>\*</sup> These species will be managed at the CDQ reserve level and not as CDQ group specific allocations.

City, state, and federal agencies and the Native corporation are the primary employers in Fort Yukon. The school district is the largest employer. Winter tourism is becoming increasingly popular -- Fort Yukon experiences spectacular northern lights. The BLM operates an emergency fire fighting base at the airport. The U.S. Air Force operates a White Alice Radar Station in Fort Yukon. Trapping and Native handicrafts also provide income. Residents rely on subsistence foods -- salmon, whitefish, moose, bear, caribou, and waterfowl provide most meat sources. One resident holds a commercial fishing permit.

#### **Facilities:**

Water is derived from two wells and is treated and stored in a 110,000-gal. tank. A combination of piped water, water delivery, and individual wells serve households. A flush/haul system, septic tanks, honeybuckets, and outhouses are used for sewage disposal. Approximately half of all homes are plumbed. The piped water system and household septic tanks were installed in 1984.

#### **Transportation:**

Fort Yukon is accessible by air year-round and by barge during the summer months. Heavy cargo is brought in by barge from the end of May through mid-September; there is a barge off-loading area but no dock. Riverboats and skiffs are used for recreation, hunting, fishing, and other subsistence activities. A state-owned 5,810' long by 150' wide lighted gravel airstrip is available; Hospital Lake, adjacent to the airport, is used by float planes. There are 17 miles of local roads and over 100 automobiles and trucks. The city transit bus system provides transport throughout the town. Snowmachines and dog sleds are used on area trails or the frozen river, which becomes an ice road to area villages during winter.

#### Climate:

The winters are long and harsh, and the summers are short but warm. After freeze-up, the plateau is a source of cold, continental arctic air. Daily minimum temperatures between November and March are usually below 0 °F. Extended periods of -50 to -60 °F are common. Summer high temperatures run 65 to 72 °F; a high of 97 °F has been recorded. Total annual precipitation averages 6.58 inches, with 43.4 inches of snowfall. The Yukon River is ice-free from the end of May through mid-September.

#### **Economy, Employment, Income and Poverty**

#### General Description of the Local Economy:

City, state, and federal agencies and the Native corporation are the primary employers in Fort Yukon. The school district is the largest employer. Winter tourism is becoming increasingly popular -- Fort Yukon experiences spectacular northern lights. The BLM operates an emergency fire fighting base at the airport. The U.S. Air Force operates a White Alice Radar Station in Fort Yukon. Trapping and Native handicrafts also provide income. Residents rely on subsistence foods -- salmon, whitefish, moose, bear, caribou, and waterfowl provide most meat sources. One resident holds a commercial fishing permit.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Fort Yukon was 49.2%.

Note: Current socio-economic measures could differ significantly.

Fort Yukon is located in the Yukon-Koyukuk Census Area.

Per Capita Income:

Median Household Income:

Median Family Income:

Persons in Poverty:

Percent Below Poverty:

\$13,360

\$29,375

\$32,083

120

18.6%

#### **Employment:**

used by residents for sewage disposal, and no homes are plumbed.

#### **Transportation:**

Access to Stevens Village is primarily via the State-owned airstrip. A new airport was recently completed with a 2,120' long by 60' wide lighted gravel runway. Fuel is shipped by barge at least three times each summer; goods are offloaded at the barge landing. Residents use skiffs, ATVs, snowmachines and dog teams for recreation and subsistence fishing and hunting.

#### Climate:

The winters are long and harsh and the summers are short but warm. After freeze-up the plateau is a source of cold, continental arctic air, Daily minimum temperatures between November and March are usually below 0. Extended periods of -50 to -60 are common. Summer high temperatures run 65 to 72; a high of 97 degrees has been recorded. Total annual precipitation averages 6.58 inches, with 43.4 inches of snowfall. The Yukon River is ice-free from the end of May through mid-September.

#### **Economy, Employment, Income and Poverty**

#### **General Description of the Local Economy:**

Stevens Village is heavily dependent upon subsistence activities. Salmon, whitefish, moose, bear, waterfowl and small game are the primary sources of meat. Gardening and berry-picking are also popular. There is some seasonal and part-time employment at the school, clinic, village council, stores, BLM fire-fighting or construction work. Three residents hold commercial fishing permits.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Stevens Village was **51.2%**.

Note: Current socio-economic measures could differ significantly.

Stevens Village is located in the Yukon-Koyukuk Census Area.	
Per Capita Income:	\$7,113
Median Household Income:	\$12,500
Median Family Income:	\$11,563
Persons in Poverty:	52
Percent Below Poverty:	61.2%
Employment:	
Total Potential Work Force (Age 16+):	62
Total Employment:	22
Civilian Employment:	22
Military Employment:	0
Civilian Unemployed (And Seeking Work):	14
Percent Unemployed:	38.9%
Adults Not in Labor Force (Not Seeking Work):	26
Percent of All 16+ Not Working (Unemployed + Not Seeking):	64.5%
Private Wage & Salary Workers:	10
Self-Employed Workers (in own not incorporated business):	0
Government Workers (City, Borough, State, Federal):	12

Wage opportunities are limited and primarily part-time with the school district, village council, clinic, or state and federal agencies. Seasonal work is found fire firefighting for the BLM, making sleds and snowshoes, trapping and handicrafts. Subsistence plays an important role in the village economy. Moose, caribou, sheep, salmon and whitefish provide a relatively stable source of food.

#### **Facilities:**

Water is derived from a well under the Black River, treated and stored in a 100,000-gal, tank. Residents haul water from the new water treatment plant/washeteria/clinic building, and use honeybuckets or outhouses for sewage disposal. No homes are plumbed. The village provides water to the school.

#### **Transportation:**

Access is primarily by air; there is a State-owned 4,000' long by 90' wide gravel runway. Residents own ATVs, snowmachines and skiffs for fishing, hunting and recreation. No roads connect Chalkyitsik with other villages, although there is a winter trail to Fort Yukon. It is accessible by small riverboat. Chalkvitsik received cargo by barge at one time, but the service is no longer provided.

#### Climate:

Chalkyitsik has a continental arctic climate, characterized by seasonal extremes of temperature. Winters are long and harsh, and summers warm and short. The average high temperature during July ranges from 65 to 72 degrees Fahrenheit. The average low temperature during January is well below zero. Extended periods of -50 to -60 degrees Fahrenheit are common. Extreme temperatures have been measured, ranging from a low of -71 to a high of 97 degrees Fahrenheit. Annual precipitation averages 6.5 inches and annual snowfall averages 43.4 inches. The Black River is ice-free from mid-June to mid-October.

#### Economy, Employment, Income and Poverty

#### **General Description of the Local Economy:**

Wage opportunities are limited and primarily part-time with the school district, village council, clinic, or state and federal agencies. Seasonal work is found fire firefighting for the BLM, making sleds and snowshoes, trapping and handicrafts. Subsistence plays an important role in the village economy. Moose, caribou, sheep, salmon and whitefish provide a relatively stable source of food.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### Income and Poverty Levels:

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Chalkyitsik was 50%.

Note: Current socio-economic measures could differ significantly.

Chalkyitsik is located in the Yukon-Koyukuk Census Area.	
Per Capita Income:	\$11,509
Median Household Income:	\$16,250
Median Family Income:	\$16,875
Persons in Poverty:	30
Percent Below Poverty:	52.6%

#### **Employment:**

Total Potential Work Force (Age 16+):

Total Potential Work Force (Age 16+):	47
Total Employment:	17

Civilian Employment: 17

Two-thirds of the full-time jobs in Tanana are with the city, school district, or Native council. There are a number of positions with local businesses and services. BLM firefighting, trapping, construction work, and commercial fishing are important seasonal cash sources. 14 residents hold commercial fishing permits. Subsistence foods include salmon, whitefish, moose, bear, ptarmigan, waterfowl, and berries.

#### Facilities:

Water and sewer utilities are operated by Too'gha, Inc., a non-profit utility board. Water is derived from three wells near the Yukon River, and four watering points are available. Nearly all residents now haul their own water from the washeteria and use privies and honeybuckets. A piped water and sewer system serves the Tanana Hospital, clinic, regional elders' residence, and the tribal council building. A washeteria and water treatment plant are operating. The landfill uses an incinerator and provides recycling services.

#### **Transportation:**

Tanana is accessible only by air and river transportation. The city maintains 32 miles of local roads. The city operates a dock on the river; barged goods can be offloaded at a staging and storage area. The state owns and operates the Ralph M. Calhoun Memorial Airport, which has a 4,400' long by 150' wide lighted gravel runway. Float planes land on the Yukon River. Cars, trucks, snowmachines, ATVs, and riverboats are used for local transportation.

#### Climate:

Tanana experiences a cold, continental climate with temperature extremes. Daily maximum temperatures during July range from 64 to 70 °F; daily minimum temperatures during January are -14 to -48 °F. Extremes have been measured from -71 to 94 °F. Average annual precipitation is 13 inches, with 50 inches of snowfall. The river is ice-free from mid-May through mid-October.

#### **Economy, Employment, Income and Poverty**

#### General Description of the Local Economy:

Two-thirds of the full-time jobs in Tanana are with the city, school district, or Native council. There are a number of positions with local businesses and services. BLM firefighting, trapping, construction work, and commercial fishing are important seasonal cash sources. 14 residents hold commercial fishing permits. Subsistence foods include salmon, whitefish, moose, bear, ptarmigan, waterfowl, and berries.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Tanana was 50%.

Note: Current socio-economic measures could differ significantly.

Tanana)s located in the Yukon-Koyukuk Census Area.	
Per Capita Income:	\$12,077
Median Household Income:	\$29,750
Median Family Income:	\$34,028
Persons in Poverty:	70
Percent Below Poverty:	23.0%

#### **Employment:**

Total Potential Work Force (Age 16+):

rotal domain volt of octoring 10.7).	210
Total Employment:	100
Civilian Employment:	100

Almost all Beaver residents are involved in subsistence activities. Moose, salmon, freshwater fish, bear and waterfowl supply meat. Poor fish returns since 1998 have significantly affected the community. Gardening and berry-picking are popular activities. Most wage employment is at the school, post office, clinic and village council. Seasonal wages are earned through BLM fire fighting, construction jobs, trapping, producing handicrafts or selling cut firewood.

#### Facilities:

A new well and pumphouse were constructed in 1997; residents haul treated water from this point. Honeybuckets are used for sewage disposal in all homes; a village-operated vehicle is used to haul wastes. Villagers rely on the washeteria for bathing and laundry. The washeteria and school use individual septic systems.

#### **Transportation:**

The State-owned 3,954' long by 75' wide lighted gravel airstrip provides daily air service. Fuel, store goods and supplies are shipped to Beaver via air cargo or barge during the summers. Trucks and ATVs are used by many residents. Snowmachines and dog teams are used during winter.

#### Climate:

Beaver has a continental subarctic climate characterized by seasonal extreme temperatures. The average high temperature during July ranges from 65 to 72 degrees Fahrenheit. The average low temperature during January is well below zero. Extended periods of -50 to -60 degrees Fahrenheit are common. Extreme temperatures ranging from a low of -70 to a high of 90 degrees Fahrenheit have been measured. Precipitation averages 6.5 inches. The average annual snowfall is 43.4 inches. The Yukon River is ice-free from mid-June to mid-October.

#### Economy, Employment, Income and Poverty

#### **General Description of the Local Economy:**

Almost all Beaver residents are involved in subsistence activities. Moose, salmon, freshwater fish, bear and waterfowl supply meat. Poor fish returns since 1998 have significantly affected the community. Gardening and berry-picking are popular activities. Most wage employment is at the school, post office, clinic and village council. Seasonal wages are earned through BLM fire fighting, construction jobs, trapping, producing handicrafts or selling cut firewood.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Beaver was 50%.

Note: Current socio-economic measures could differ significantly.

Beaver is located in the Yukon-Koyukuk Census Area.	
Per Capita Income:	\$8,441
Median Household Income:	(\$28,750
Median Family Income:	\$29,792
Persons in Poverty:	15
Percent Below Poverty:	11.1%
Employment:	
Total Potential Work Force (Age 16+):	86
Total Employment:	55
Civilian Employment:	55
Military Employment:	0
Civilian Unemployed (And Seeking Work):	12

the City.

#### **Economy:**

The economy in St. Mary's seasonal. 74 residents hold commercial fishing permits. A cold storage facility is available. Cash income is supplemented by subsistence activities and trapping. Salmon, moose, bear, and waterfowl are harvested. There are two general stores, Alaska Commercial Co. and Yukon Traders. There is also a regional post office.

#### Facilities:

Water is derived from Alstrom Creek reservoir and is treated. The majority of the homes in the city have complete plumbing and are connected to the piped water and sewer system. Waste heat from the power plant supports the circulating water system. A 1.7-million-gallon sewage lagoon provides waste treatment. Six residences haul water and use honeybuckets. The city provides honeybucket pickup services. A washeteria is available nearby at Pitka's Point.

#### **Transportation:**

St. Mary's is served by barge and aircraft. The state-owned 6,003' long by 150' wide gravel runway and 1,900' long by 60' wide crosswind strip provide year-round access. The airfield is capable of receiving large jet aircraft, but service was discontinued in 1990. A 22-mile road links St. Mary's to Andreafsky, Pitka's Point, and Mountain Village. They are not maintained during winter months but are instead used by snow machines. The Andreafsky River provides the only deep-water dock in the Delta.

#### Climate:

The climate is continental with a significant maritime influence. Temperatures range between -44 and 83 °F. Annual precipitation measures 16 inches, with 60 inches of snowfall. The Yukon is ice-free from June through October.

#### **Economy, Employment, Income and Poverty**

#### General Description of the Local Economy:

The economy in St. Mary's seasonal. 74 residents hold commercial fishing permits. A cold storage facility is available. Cash income is supplemented by subsistence activities and trapping. Salmon, moose, bear, and waterfowl are harvested. There are two general stores, Alaska Commercial Co. and Yukon Traders. There is also a regional post office.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Saint Mary's was 50.5%.

Note: Current socio-economic measures could differ significantly.

Saint Mary's is located in the Wade Hampton Census Area.	
Per Capita Income:	(\$15,837
Median Household Income:	\$39,375
Median Family Income:	\$31,875
Persons in Poverty:	109
Percent Below Poverty:	20.4%
Employment:	
Total Potential Work Force (Age 16+):	339
Total Employment:	219
Civilian Employment:	219
Military Employment:	0
Civilian Unemployed (And Seeking Work):	28

and the U.S. Census Bureau's American FactFinder.

#### Income and Poverty Levels:

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Alakanuk was 49.4%.

Note: Current socio-economic measures could differ significantly.

Alakanuk is located in the Wade Hampton Census Area.

The state of the s	•	
Per Capita Income:		\$6,884
Median Household Income:		\$26,346
Median Family Income:		\$26,500
Persons in Poverty		7-1,00

Percent Below Poverty:

33.8%

224

#### **Employment:**

Total Potential Work Force (Age 16+):	389
Total Employment:	139
Civilian Employment:	139
Military Employment:	0
Civilian Unemployed (And Seeking Work):	38
Percent Unemployed:	21.5%

http://www.commerce.state.ak.us/dca/commdb/CF\_BLOCK.cfm

1/29/2010

#### Alaska Division of Community and Regional Affairs

Page 5 of 8

Marshall has a seasonal economy with most activity during the summer. Fishing, fish processing, and BLM fire-fighting positions are available seasonally. Forty residents hold commercial fishing permits. Subsistence activities supplement income, Salmon, moose, bear, and waterfowl are harvested. Trapping provides some income.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Marshall was 47.1%.

Note: Current socio-economic measures could differ significantly.

Marshall s located in the Wade Hampton Census Area.	
Per Capita Income:	\$9,597
Median Household Income:	\$32,917
Median Family Income:	\$37,750
Persons in Poverty:	101
Percent Below Poverty:	28.6%

#### **Employment:**

Total Potential Work Force (Age 16+):

210

Total Employment:

110

## RC106

#### **Income and Poverty Levels:**

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Alakanuk was 49.4%.

Note: Current socio-economic measures could differ significantly.

Alakanuk is located in the Wade Hampton Census Area.	And the second s
Per Capita Income:	\$6,884
Median Household Income:	\$26,346
Median Family Income:	\$26,500
Persons in Poverty:	224
Percent Below Poverty:	33.8%

#### **Employment:**

Total Potential Work Force (Age 16+):	389
Total Employment:	139
Civilian Employment:	139
Military Employment:	0
Civilian Unemployed (And Seeking Work):	38
Percent Unemployed:	21.5%

http://www.commerce.state.ak.us/dca/commdb/CF BLOCK.cfm

1/29/2010

#### Alaska Division of Community and Regional Affairs

Page 5 of 8

Marshall has a seasonal economy with most activity during the summer. Fishing, fish processing, and BLM fire-fighting positions are available seasonally. Forty residents hold commercial fishing permits. Subsistence activities supplement income. Salmon, moose, bear, and waterfowl are harvested. Trapping provides some income.

The following Income and Employment data is from the 2000 U.S. Census.

Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network

and the U.S. Census Bureau's American FactFinder.

#### Income and Poverty Levels:

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Marshall was 47.1%.

Note: Current socio-economic measures could differ significantly.

Marshall s located in the Wade Hampton Census Area.	
Per Capita Income:	\$9,597
Median Household Income:	\$32,917
Median Family Income:	\$37,750
Persons in Poverty:	101
Percent Below Poverty:	28.6%

#### **Employment:**

Total	Potential	Work	Force	(Age	16+):	
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#### income and Poverty Levels:

RCIOG

These figures are estimates based on a sample, and are subject to sampling variability. The percent of all households sampled in Emmonak was **46.8**%.

Note: Current socio-economic measures could differ significantly.

Emmonak)s located in the Wade Hampton Census Area.	
Per Capita Income:	\$9,069
Median Household Income:	\$32,917
Median Family Income:	\$38,750
Persons in Poverty:	121
Percent Below Poverty:	16.2%
•	
Employment:	
Total Potential Work Force (Age 16+):	448
Total Employment:	217
Civilian Employment:	217
Military Employment:	. 0
Civilian Unemployed (And Seeking Work):	65
Percent Unemployed:	23.1%
Adults Not in Labor Force (Not Seeking Work):	23.1% 166
Percent of All 16+ Not Working (Unemployed + Not Seeking):	51.6%
Total of All 10 that working (offertiployed that deeking).	31.076
http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.cfm	1/29/2010
Mountain Village is located in the Wade Hampton Census Area.	
Per Capita Income:	[ 00.050 ]
Median Household Income:	\$9,653
Median Family Income:	\$31,250
Persons in Poverty:	\$30,000
Percent Below Poverty:	160
Count bolow Coverty.	22.2%
Employment:	
Total Potential Work Force (Age 16+):	425
Total Employment:	180
Civilian Employment:	
Military Employment:	180 0
Civilian Unemployed (And Seeking Work):	80
Percent Unemployed:	30.8%
Adults Not in Labor Force (Not Seeking Work):	
Percent of All 16+ Not Working (Unemployed + Not Seeking):	165 57.7%
Private Wage & Salary Workers:	57.7%
Self-Employed Workers (in own not incorporated business):	
Government Workers (City, Borough, State, Federal):	6
Unpaid Family Workers:	124
- The second of	0

City of Alakanuk P.O. Box 167 Alakanuk, AK 99554-0167 RC107

Saturday, January 30, 2010

Alaska Board of Fisheries Attention: Board Support P.O. Box 115526 Juneau. AK 99811-5526

RE: Committee C Proposals Comments

Dear Mr. Chairman:

Ladies and Gentlemen of the Board, including all staff, thank you all for giving me this last opportunity to comment on the proposals regarding Committee C.

According to the River-wide patterns of fishing, fishing gear and methods; on the lower river there is approximately 13 villages, 14 villages on the middle river, which use nets for their fishing gear. There are approximately 18 villages on the upper river that utilize fish wheels.

Now this is of the utmost concern to the native people heavily relying on those nets as their fishing gear. It is easy to say; "use 7.5 inch by 35 mesh deep nets", but how do you say to the upper river non-natives that may utilize the fish wheels, "this is how we are going to heavily regulate your fish wheels", example: Drag and/or pull those fish wheels completely out of the water!

Your final decision will heavily impact the Wade Hampton District. Please try and have empathy. Our Lower Yukon area within our Wade Hampton District remains to be the **POOREST** in **ALL** of Alaska and in the whole contingent of the Lower 48 accordingly.

Please make a decision unwise to the countless indigenous native people, because your professional opinion will have a dramatic heavy disruption to our quality of livelihood.

The <u>WADE HAMPTON DISTRICT</u> is bad enough suffering a negative economic daily situation that has a destructive insinuation to our <u>POOREST WADE HAMPTON</u> geographical area of our state and our nation, recognized by the Anchorage Daily News, the Department of Labor, the Department of Social Services, etc.

We are a severely hampered people and villages. We have bent over backwards, tightened our belts, swallowed our pride, our ego, and humbled our selves. We have willing been heavily regulated, just so we may produce a fruitful outcome-our Alaska Native subsistence activities. We graciously oppose proposals 83 to 97.

Sincerely,

Michael James City Administrator

#### Re: In support of RC 84



Dear Alaska Board of Fisheries:

AVCP supports the language stated in RC 84 for the following reasons:

- 1. The least cost, least invasive, least devastating answer to all from the Lower Yukon to the Upper Yukon.
- 2. Every fisher from the mouth to the Canadian border, in the summer of 2009, all contributed to conservation of the Chinook salmon stocks.
  - a. No one benefited by varied time & area restrictions or gear type restrictions.
  - b. Everyone suffered in the inability to meet their adequate subsistence needs to conserve our Chinook salmon stocks.
  - c. It was closed to ALL user groups.
- 3. Salmon enumeration projects in most, if not all, areas of the river met their escapement goals.
- 4. The quality of escapement improved tremendously as stated in various testimonies during the public testimony opportunity and the committee process.
- 5. The State of Alaska, acting through its principle manager of the Yukon River (the Alaska Department of Fish & Game) met and exceeded their escapement and treaty obligation endeavor into Canada.
- 6. This measure, verified as a result of the actions imposed by the department in the summer of 2009, yielded the same desired results pursued by the proponents of the stated proposals in RC 84.
- 7. In the event of the ever changing variability of the runs, this measure allows the Alaska Department of Fish & Game to open/close the subsistence/commercial openings before, during and after the 5-7 day closure. This measure gives the department the management tools to be responsive to the ever changing run sizes of the Yukon River to allow for maximum escapement and human utilization of our common resource.
- 8. This provision sunsets when the Yukon River Chinook salmon are no longer listed as a stock of concern.

Mr. Chairman and members of the Board, we thank you for the opportunity to submit record comments and voice our concerns. Additionally, we thank you for your consideration. Furthermore, we thank you in joining our efforts to reduce the impacts of the Bering Sea trawl fishery on our Chinook salmon stocks.

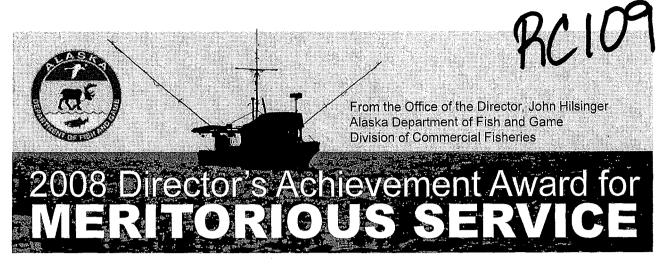
I for Myron P. Neurong Sr.

Timothy O. Andrew, Director

AVCP Natural Resources

For Myron P. Naneng Sr., President

AVCP



# Dan Bergstrom • Region III Fishery Biologist IV, Anchorage MERITORIOUS SERVICE AWARD



Dan Bergstrom has 29 years of dedicated service to the state as a fishery management biologist. He initially worked on salmon smolt, test fish, herring, and crab projects in Kodiak, Bristol Bay, and Arctic-Yukon-Kuskokwim (AYK), but soon found his niche in AYK fisheries management. Dan has been directly associated with the management

of the herring and salmon resources of the Yukon Area for 26 years.

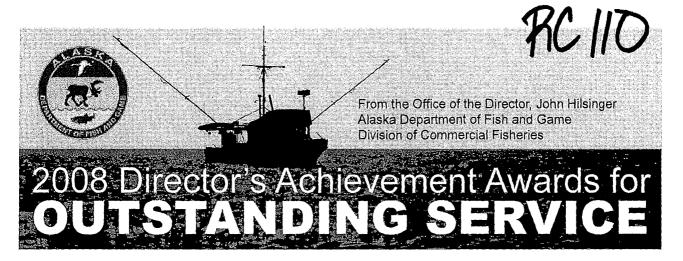
Beginning in 1984, Dan was the Assistant Lower Yukon Area Management Biologist. In 1989, he was promoted to the Lower Yukon Area Management Biologist. He held this and a similar position—Yukon Area Summer Season Management Biologist—through 2000. In March 2000, Dan was promoted to the AYK Regional Management Supervisor position where he is responsible for supervision and coordination of management of all fisheries in the AYK Region. Additionally, Dan was an integral participant in the U.S./Canada Yukon River Salmon Treaty Negotiations and was also an active member in the associated Joint Technical Committee. He is currently the co-chair alternate to the Yukon Panel.

Since becoming the Regional Management Supervisor, Dan's performance has been integral to the success of the past three AYK Board of Fisher-

ies cycles. He has ensured that oral and written reports and the associated action plans for each of the region's management areas followed established procedures. Dan has taken the lead in researching and directing the production of written and oral reports for these past meetings. Because of his hard work and attention to detail, AYK has set the standard for future presentations.

Dan was intimately involved in the development of the Yukon River salmon management protocol. He was selected to represent the division on the State and Federal working group because of his expertise in subsistence issues and familiarity with the working group process. He represented the division's interests very well in this forum. Although Dan is a firm believer that the Alaska Department of Fish and Game should manage Alaska's fish and game resources, he has continued to work extremely well with inseason federal managers.

Dan Bergstrom is an extremely dedicated state employee who takes his job very seriously and who strives to complete all his duties to the best of his ability. It is not uncommon to find Dan working late into the night and on weekends to ensure timely and effective management of AYK fisheries. Dan believes in doing what is right for the resource and the people who depend on them. His long experience and institutional knowledge of AYK fisheries resources has made him an excellent supervisor and mentor for many of the region's current biologists. He is well respected both by his peers and the public he serves. We are very fortunate to have Dan working the AYK region and he is very deserving of the Division's 2008 Achievement Award for Meritorious Service.



#### Jim Menard • Region III Fishery Biologist III, Nome



Jim Menard began his career with the Alaska Department of Fish and Game as a fisheries technician in the Bristol Bay Area in the early 1980s. For

several summers he worked out of Dillingham on salmon counting towers, Portage Creek sonar, or with the Togiak herring fishery. In the late 1980s he worked in Sitka and Cordova as well as with the Togiak herring fishery. In the early 1990s, Jim worked summers with the Cape Romanzof herring fishery and sampled salmon catches in Emmonak, and in the winter, he did scale aging and scale pattern analysis of Yukon River Chinook salmon. During this time, Jim became aware of how being a student at the University of Alaska, Fairbanks helped in interacting with Western Alaska fishermen—as he knew someone from every village that had been a student at the University of Alaska, Fairbanks.

Jim returned to Bristol Bay as a Fishery Biologist I in 1996 and 1997, but the lure of Bethel was too much for him. In 1998, he accepted the Kuskokwim Assistant Area Biologist position which covered herring and Kuskokwim Bay salmon management. Jim was one of the last fishery biologists to live year-round in Bethel and made the most of his time there. In 2001, Jim accepted the Norton Sound Area Biologist position in Nome where he continues to work today. Jim has fit into this position very well. He has visited almost every village in the Norton Sound and Kotzebue Sound

areas including St. Lawrence Island. Jim has developed a diverse knowledge of Norton Sound and Kotzebue area fisheries, which include salmon, herring, and crab.

Jim has a phenomenal memory and a wealth of experience he can draw on—from his early days with the Togiak herring fishery and his experiences in the Yukon, Kuskokwim, and Norton Sound. He is always a gracious and entertaining host to visitors to Nome. Jim has a great sense of humor and is a people person. He is also an example of an extremely dedicated state employee, striving to do best job possible for the resource and the people that depend on those resources.

Jim has a great ability to attract new fishery biologists to Nome and has proven to be an effective mentor for new staff. Jim has succeeded in hiring many local residents to fill fishery technician positions in Norton Sound. He has fostered a good working relationship with Norton Sound Economic Development Corporation in developing new fisheries, and new research and escapement monitoring projects. Jim has done well at the Alaska Board of Fisheries meetings he has attended. He has gained the respect and admiration of his staff and colleagues and is an asset to the department and its mission. He is extremely dedicated, works many hours, travels to numerous remote village meetings, speaks at schools to get local students interested in working for the Alaska Department of Fish and Game, and is dedicated to identifying and addressing the issues affecting Norton Sound and Kotzebue fisheries to the benefit of the resource and the people of this state. It is a pleasure to recognize his service with this 2008 Director's Achievement Award for Outstanding Service.

RC 111

#### Comments on the Report of Committee B

January 28, 2010

By Charles Lean, Director of Fisheries Research and Development NSEDC

#### Comments on the overall report:

Both the NSEDC staff and several members of the general public expressed concern that the Committee did not cite and may not have considered the Fish and Game Advisory Committee minutes/ comments. The designated representatives did not realize they needed to repeat their statements from the BOF meeting in the Committee meeting.

## Comments on proposal the Norton Sound Stocks of Concern and on the Management Action plans:

NSEDC Staff did mention that the lower escapement goal on the Niukluk chum would result in the reduced likelihood of attaining a harvestable surplus sufficient to support a commercial fishery. Thus, an allocative decision is being made. The statement that Fish and Game managers will not be as likely to restrict subsistence opportunity with the lower goal is also an allocative decision, as is the resulting increased opportunity for commercial harvest of pink and coho salmon. This is the rationale for an OEG, not an SEG.

RC 16 and 17 seemed to be of concern to the Committee members in that the decision process of fisheries management was left too much to the discretion of the managers. NSEDC agrees that the tool box of the Norton Sound managers is particularly limited. This is why the NSEDC FR&D project support is well developed. The Emergency Order procedure of management was developed to solve the timeliness issues of the former Federal System and to provide ready public access to the managers. The risks of the State process are the trust required of the manager. Fisheries management is a balance of science and art. The managers must consider the stock biology, must maintain an orderly fishery, and act as risk managers as well. The small fisheries of Norton Sound are conducted on terminal stocks, the fishing power is quite small and if an error in judgment is made it can be reversed quickly. The endorsement of the action plans by both ACs expresses some confidence in the managers.

The comment in RC 16 that Nome Subdistrict chum salmon are caught at Moses Point is not supported by the 1978 tagging study (Gaudet and Schaffer, 1983). Chums tagged at Moses point were generally recovered in that same SD and a few were recovered to the south at Unalakleet and Shaktoolik.

NSEDC Staff did discuss RC24, run timing graphs, as a supportive alternative to the Fish and Game staff's RC in the discussion of RC 17. We agree with the Department.

#### **Proposal #74** comments:

The rationale for expanding the SD is 1) harvest less watermarked salmon, 2) provide more area to disperse fishing effort and to better target specific types of salmon. NSEDC and Fish and Game both provided maps showing the outer boundaries of the existing SD.

A committee member did recognize the need to limit the offshore boundary of the redrawn SD.

#### Proposals 73 &75 comments:

NSEDC does believe there is a conservation issue in this District for chinook, sockeye and coho salmon. So much so, that we have closed the commercial salmon buying station at Teller.

#### Proposal 80 comment:

The proposal has another impact not brought out in committee. If sport fishing were allowed the subsistence hook and line boundaries would be expanded to the upriver limits of the sport fishery. NSEDC does not have a position on this proposal.

# Subsistence and Personal Use Salmon Harvests in the Alaska Portion of the Yukon River Drainage, 2008

by
William H. Busher
Toshihide Hamazaki
and
Deena M. Jallen

14

December 2009

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Appendix B1.—Chinook salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1998–2008.

												1998-2002	2003-2007
Community	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average	Average
Hooper Bay	13	173	114	2,150	282	722	1,042	157	376	430	388	546	545
Scammon Bay	378	938	449	732	840	1,128	996	691	507	768	1,104	667	818
Coastal District Total	391	1,111	563	2,882	1,122	1,850	2,038	848	883	1,198	1,492	1,214	1,363
Nunam Iqua	527	855	684	550	393	925	647	338	371	907	163	602	638
Alakanuk	1,930	1,236	1,109	973	1,773	1,707	1,317	860	690	1,257	1,238	1,404	1,166
Emmonak	2,396	3,337	2,205	2,473	1,751	2,763	2,768	1,730	2,311	2,326	2,696	2,432	2,380
Kotlik	2,389	1,420	1,893	3,093	1,686	937	1,148	2,130	1,750	1,569	2,066	2,096	1,507
District 1 Subtotal	7,242	6,848	5,891	7,089	5,603	6,332	5,880	5,058	5,122	6,059	6,163	6,535	5,690
Mountain Village	2,533	2,162	1,715	1,864	1,523	2,174	2,362	2,383	1,659	2,077	¹ 1,645≀	1,959	2,131
Pitkas Point	817	632	753	651	566	633	609	618	274	320	544	684	491
St. Mary's	2,679	2,150	1,810	3,815	2,045	1,916	2,357	2,693	2,233	3,573	1,756	2,500	2,554
Pilot Station	1,715	2,715	2,378	2,614	2,530	2,886	2,406	1,658	1,976	2,028	1,597	2,390	2,191
Marshall	1,711	2,780	3,279	4,498	2,290	2,059	1,990	1,804	1,897	2,555	3,284	2,912	2,061
District 2 Subtotal	9,455	10,439	9,935	13,442	8,954	9,668	9,724	9,156	8,039	10,553	8,826	10,445	9,428
Russian Mission	1,314	2,722	1,860	3,428	1,887	2,057	2,337	1,894	1,851	1,301	2,949	2,242	1,888
Holy Cross	2,648	4,581	1,249	2,711	1,813	2,395	1,993	2,817	3,165	2,902	2,509	2,600	2,654
Shageluk	552	412	805	222	439	550	418	420	358	448	397	486	439
District 3 Subtotal	4,514	7,715	3,914	6,361	4,139	5,002	4,748	5,131	5,374	4,651	5,855	5,329	4,981
Lower Yukon River Total	21,211	25,002	19,740	26,892	18,696	21,002	20,352	19,345	18,535	21,263	20,844	22,308	20,099
Anvik	1,025	776	205	608	708	1,286	1,588	1,206	958	1,321	1,433	664	1,272
Grayling	2,177	2,476	839	1,077	2,249	1,613	1,869	1,878	1,702	1,500	1,761	1,764	1,712
Kaltag	1,870	2,051	1,074	1,506	1,435	1,838	1,656	3,367	2,833	1,456	2,403	1,587	2,230
Nulato	4,147	1,799	1,083	2,127	1,773	2,531	5,199	2,749	2,707	2,431	1,250	2,186	3,123
Koyukuk	800	506	175	449	323	860	400	396	835	811	513	451	660
Galena	1,668	2,539	788	1,755	1,522	3,112	3,296	2,864	2,380	2,511	2,232	1,654	2,833
Ruby/Kokrines	3,891	777	1,577	2,033	954	631	1,620	1,193	304	1,594	637	1,846	1,068
District 4 Subtotal	1 <u>5,</u> 578	10,924	5,741	9,555	8,964	11,871	15,628	13,653	11,719	11,624	10,229	10,152	12,899
(Excluding Koyukuk River)													
Huslia	23	90	424	377	222	469	285	207	258	146	255	227	273
Hughes	91	105	50	144	67	113	291	33	8	8	61	91	91
Allakaket	85	108	41	76	200	306	65	68	23	53	58	102	103
Alatna	4	10	8	0	3	12	0	0	. 14	0	16	5	. 5
Bettles	20	1	0	0	0	0	0	3	0	0	0	4	1
Koyukuk River Subtotal	223	314	523	597	492	900	641	311	303	207	390	430	472
District 4 Total	15,801	11,238	6,264	10,152	9,456	12,771	16,269	13,964	12,022	11,831	10,619	10,582	13,371

-continued-



#### Appendix B1.-Page 2 of 2.

Community Tanana	1998	1999										1998-2002	
Tonono		1777	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average	Average
1 anana	5,212	3,388	2,895	4,112	2,379	5,332	2,689	3,729	3,794	5,498	3,981	3,597	4,208
Rampart <sup>a</sup>	885	2,018	847	1,857	852	1,411	287	411	429	250	136	1,292	558
Fairbanks <sup>b</sup>	1,231	851	1,342	1,125	1,767	1,932	1,997	2,584	2,184	2,492	1,898	1,263	2,238
Stevens Village	1,232	1,214	466	1,111	1,334	1,121	2,394	1,570	1,245	610	753	1,071	1,388
Birch Creek	48	24	72	0	67	78	82	131	174	113	32	42	116
Beaver	470	473	196	1,368	702	1,156	858	957	830	1,244	546	642	1,009
Fort Yukon	1,771	2,539	988	2,361	2,348	4,004	4,430	3,591	3,144	4,076	1,991	2,001	3,849
Circle	685	524	627	447	1,533	895	565	1,283	694	1,057	519	763	899
Central	170	91	26	84	58	144	83	175	130	334	48	86	173
Eagle	2,473	2,558	1,087	1,033	1,910	2,081	1,512	2,566	2,303	1,999	1,068	1,812	2,092
Other c	446	488	205	40	348	862	357	315	330	472	362	305	467
District 5 Subtotal	14,623	14,168	8,751	13,538	13,298	19,016	15,254	17,312	15,257	18,145	11,334	12,876	16,997
(Excluding Chandalar and Black Rivers)													
Venetie	168	127	103	28	77	125	352	59	667	1,002	292	101	441
Chalkyitsik	11	35	0	0	26	50	60	53	0	0	0	14	33
Chandalar/Black River Subtotal	179	162	103	28	103	175	412	112	667	1,002	292	115	474
District 5 Total	14,802	14,330	8,854	13,566	13,401	19,191	15,666	17,424	15,924	19,147	11,626	12,991	17,470
Manley	209	136	58	534	336	213	239	289	361	333	106	255	287
Minto	275	317	0	197	19	317	35	35	31	82	12	162	100
Nenana	1,187	975	541	1,405	509	1,193	633	533	712	893	322	923	793
Fairbanks <sup>d</sup>	230	195	360	191	159	392	449	971	125	409	108	227	469
Other *	18	1	24	0	44	30	32	0	0	0	57	17	12
District 6 Tanana R. Total	1,919	1,624	983	2,327	1,067	2,145	1,388	1,828	1,229	1,717	605	1,584	1,661
Upper Yukon River Total	32,522	27,192	16,101	26,045	23,924	34,107	33,323	33,216	29,175	32,695	22,850	25,157	32,503
Alaska, Yukon River Total <sup>f</sup>	53,733 54,124	52,194 53,305	35,841 36,404	52,937 55,819	42,620 43,742	55,109 56,959	53,675 55,713	52,561 53,409	47,710 48,593	53,958 55,156	43,694 45,186	47,465 48,679	52,603 53,966

<sup>&</sup>lt;sup>c</sup> Other permit holders who fished in District 5 but did not reside in the communities listed.

d Harvest by Fairbanks subsistence permit holders who fished in the Tanana River. Does not include harvest by personal use permit holders.
c Other permit holders who fished in District 6 but did not reside in the communities listed.

f Does not include the Coastal District.

 RCIIS
Comments of Northern Nartae Sand Advisory Committee Representative
There read the comments of Challelan RCIII and I agree with his Comment on the overall report.  I did not understand.
Tam worried we will never recover our chun fishery. Just lower the goal when it is not met. When do the villages get to talk?
JACK TRAGES FROM

# RC114

#### Comments related to Committee "C" report

#### January 30, 2010

Dear Board of Fisheries and staff:

Upon review of the final committee report, we have discovered the following discrepencies not reflected in your report. The Lower Yukon Advisory Committee is reflected in AC #1:

Lower Yukor	n Advisory Committee Position	Committee "C' Report
Proposal 81	Support	None
Proposal 82	No action	
Proposal 83	Oppose	None
Proposal 84	Oppose	Not reflected
Proposal 85	Oppose	Not reflected
Proposal 86	Oppose	Reflected
Proposal 87	No action	
Proposal 88	Oppose	None
Proposal 89	Oppose	None
Proposal 90	Oppose	None
Proposal 91	Oppose	None
Proposal 92	Oppose	Reflected
Proposal 93	Oppose	Not reflected
Proposal 94	Oppose	None
Proposal 95	Oppose	None
Proposal 96	Oppose	Not reflected
Proposal 97	Oppose	Not reflected
Proposal 98	Support	Reflected
Proposal 99	Oppose	Reflected

Please rectify the discrepencies by notifying the board that opposition does exist in the ACs, specifically by the Lower Yukon. We appreciate the opportunity to make these changes.

Sincerely,

Stanislaus Sheppard

Lower Yukon Advisory Committee member

# Frm: Fbnxs, Tem, Edgle: Monto-Nomani/30/2010 Committee C. Deport PC 115

Depresentatives from The Ronana Dampart monley AC, Fairbanks AC, Aninto orienana AC, Eagle AC participated for the entire Time the committee was in dession. The committee report as all one of the supported and spoke in Lower of The following proposals:

X 89, 90, 92, 94, 95, 96, 97,

2. all aboue AC'S supported #88 except Eagle AC.

3. Torono Dompost monley AC apposed changes to all omoragement pond (193 and 194) and the Committee c report only has TRM lower as apposing 193 + 194.

STAN ZURAY Ston Zerrage VirgilL. Umphenour January 30, 2010

To: Board of Fisheries From: Greg Roczicka



Re: Holitna Reserve (HB #227) Supplemental info to BOF RC 79:

Reference 6/50 RC 98

Attached is the current status of this bill in the legislative process. Also included is the original proposal as submitted to the BOF in 2006 along with DNR's overview of the Holitna Basin from their Kuskokwim Area Plan that highlights and emphasizes the importance of the area's high fish & wildlife values.

This bill has had one hearing to date (January 26) in the House Special Committee on Fisheries where Dept. of Law, Dept of Natural Resources, legislative staff, and public representatives clarified in testimony or response to questions that this bill does not: 1) create an area that would be exclusive to any particular user group, 2) does not create any new or conflicting authorities between management agencies, 3) does not preclude or prevent any existing activities or access requirements currently allowed on state lands, and 4) does not change any existing hunting fishing or trapping regulations. What it will do is require a much higher level of review and standards to be complied with in regards to habitat when future activities are being considered for potential development; and set standards for proactive management of fish or wildlife populations to provide and maintain for high levels of human consumptive use. In short an integration of the Public Use Area, Refuge, and Intensive Management Area concepts and structure found in other areas of similar statutory purpose.

The bill was held over in its current committee with the next hearing scheduled for 10:15am Tuesday, February 2nd. Board action to support this legislation at this meeting would therefore be very timely. There have been no changes discussed or further amendments offerred to date in the language provided to you in RC 79.

Regarding the activity summary for development of this legislation that is included on page 2 of RC 79, since that time further consultation with both DNR & ADFG have occurred and their recommendations incorporated into the current language. The Anchorage Fish & Game Advisory Committee addressed the latest

draft at their December meeting and re-affirmed their support; and Representative Neuman from the Mat-Su Valley house district has signed on as a co-sponsor of this bill.

There is currently one pending developmental activity within the area. As noted in the summary, in October of 2006, DNR denied coal bed methane exploration permits after a two year review period stating in their Final Best Interest Finding that "...the possible adverse impacts to the high fish & wildlife values and related human uses are too great to be mitigated with the project as proposed..." The developer subsequently appealed this decision which DNR upheld again in its review process that carried into the following year. The developer then took the matter to Court and at its first hearing in March of 2008, the Court granted an unnopposed motion for remand back to DNR to reconsider. In early December, 2009, DNR (with no further public notice or input) issued notice that under this reconsideration, that they have approved permits for natural gas exploration, which they deem to be of significantly lesser potential impact to the area. The village of Sleetmute has since requested an extension for the comment/appeal deadline, which was granted until February 11, 2010.

We understand that a Board concern about taking comprehensive action on this issue is regarding procedural issues surrounding the original proposal #157, and its referral to your Habitat Committee, with thoughts to now put off action until your March, 2010 meeting. If that is the case we would be willing to immediately withdraw the proposal to facilitate the Board's consideration and action at this meeting. The Board may then simply and straightforwardly address an existing piece of legislation that is presently on the move in the legislative process, such as we understand is a relatively common occurrence when a proposal is not involved. It is anticipated that this bill will move out of the fisheries committee next week, on to its only other referral at the House Resource Committee.

If Board members see the merit in this legislation and desire to weigh in on affecting its potential passage where it would do the most good, now is the time to do so. We believe that your endorsement would be highly beneficial in helping to achieve this purpose.

26th Legislature(2009-2010)

### Bill History/Action for 26 Legislature

**BILL: HB 227** 

SHORT TITLE: HOLITNA BASIN RESERVE

BILL VERSION: SSHB 227

CURRENT STATUS: (H) FSH

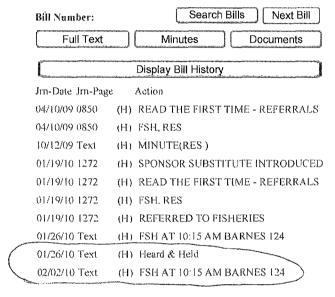
**STATUS DATE: 01/19/10** 

THEN RES

SPONSOR(s): REPRESENTATIVE(s) HERRON, Neuman

HEARING: (H) FSH Feb 02 10:15 AM BARNES 124 TELECONFERENCE

TITLE: "An Act relating to the establishment of state fish and game reserves; creating the Holitna River Basin Hunting. Fishing, and Trapping Reserve; and providing for an effective date."



Similar Subject Match or Exact Subject Match BOARDS & COMMISSIONS FISH & GAME (BOTH) OIL & GAS PARKS & RECREATION PUBLIC LAND SUBSISTENCE

Bill Number:

Display Bill

Next Bill

Return to Basis Main Menu (26 Legislature)

**PROPOSAL 157** - This proposal asks the Board of Fisheries to recommend to the legislature, as per AS 16.05.251(a)(1), that a reserve area be designated as follows:

Per authority granted under 16.05.251(a)(1), that the Board of Fisheries may adopt regulations it considers advisable for setting apart fisheries reserve areas, refuges, and sanctuaries in the water or on the land of the state over which it has jurisdiction, subject to approval of the legislature, the Board hereby establishes the Holitna Basin Fisheries Reserve consisting of the mainstem and tributaries of the Holitna River from Gemuk Lake to its confluence with the Kuskokwim.

For the purposes of this designation, "reserve" means to specifically recognize, elevate and emphasize the area's high productivity potential; and that habitat maintenance for its abundant fisheries resources, dependent subsistence and other human harvest opportunity is the primary over-riding management purpose, such that any other activities are of secondary consideration in their potential degradation to the areas' highest and best use; this being, preservation in perpetuity for the Holitna Basin's significant productivity and contribution for salmon and other fisheries species to the entire Kuskokwim drainage.

**ISSUE:** The Holitna Basin is a highly productive ecosystem essential to the regional health of human and fisheries resources in the Kuskokwim region that has little in place against other competitive use interests to assure conservation of habitat and related fish stocks into the future.

WHAT WILL HAPPEN IF NOTHING IS DONE? Future development activities representing significant threat to maintaining long term integrity of the Holitna river system's fisheries productivity for the entire Kuskokwim drainage may well occur.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR PRODUCTS PRODUCED BE IMPROVED? The magnitude and fundamental support of the Holitna River system for sustained yield of fish stocks throughout the entire Kuskokwim drainage, and the importance of those fish stocks to residents of the Kuskokwim cannot be over emphasized. Studies over just the last few years have established that 25 percent of Kuskokwim River Chinook salmon (a board recognized stock of concern) comes from the Holitna River Basin. To punctuate this areas' comparative importance in the broader state perspective; the subsistence catch of Kuskokwim Chinook represents 50 percent of the total King salmon subsistence harvest statewide.

It also has recently been found that as much as 50 percent of the sockeye salmon for the Kuskokwim originate in the Holitna River Basin. Of special note is that these sockeye may be unique in that they spawn and rear in a river environment, as compared to most other statewide sockeye populations that are dependent on lake systems for their early life history. It has yet to be determined which parts of the river system are most important for the 2 rearing years spent in the river. There is also heavy use of the Holitna Basin by whitefish species that are important in contributing to subsistence harvests throughout the entire Kuskokwim region.

WHO IS LIKELY TO BENEFIT? All consumptive and non-consumptive user groups dependent upon the fish stock contributions of the Holitna River Basin.

WHO IS LIKELY TO SUFFER? Entities focused or oriented towards speculative, short term interest gains, without abiding consequences incumbent to degradation aftereffects.

OTHER SOLUTIONS CONSIDERED? Pursue designation as a Critical Habitat Area: The Kuskokwim area has been woefully lacking historically in funding and research activities

common to other areas of the state. With the recent advent of management support, significant findings as referenced above have already been found in just a few short years. At present this remains an option for further discussion.

PROPOSED BY: Orutsararmiut Native Council and Sleetmute Traditional Council
(HQ-06F-118)

**PROPOSAL 158** - 5 AAC 01.240. Marking and use of subsistence-taken salmon. Amend this regulation as follows:

(c) In Districts 1-3, during an opening for commercial salmon fishing, a person may not possess king salmon taken for subsistence uses unless **both lobes of the caudal fin (tail fin) have** [THE DORSAL FIN HAS] been **immediately** removed. A person may not sell or purchase salmon from which **both lobes of the caudal fin (tail fin) have** [THE DORSAL FIN HAS] been removed.

**ISSUE:** Removing the dorsal fin of king salmon harvested by subsistence fishers in District 1-3 in the Yukon Area during the open commercial fishing season places an undue hardship on subsistence fishers because of the following: 1) removing the dorsal fin from king salmon is physically difficult; 2) removing the dorsal fin often exposes flesh prior to processing; and 3) the regulations for marking king salmon in Districts 1-3 are inconsistent with other areas within the state regulations (e.g. 5 AAC 1.360., 5 AAC 01.590., 5 AAC 01.640.).

WHAT WILL HAPPEN IF NOTHING IS DONE? The flesh of the fish will continue to be contaminated if this problem is not solved since removal of the dorsal fin from king salmon harvested for subsistence in Districts 1-3 often breaks the skin of the dorsal fin area, exposing flesh prior to processing and allowing the flesh of the fish to be contaminated. Additionally, inconsistencies between the marking requirements for subsistence fishers in Districts 1-3 and those for other fisheries in the state will cause confusion.

WILL THE QUALITY OF THE RESOURCE HARVESTED OR PRODUCTS PRODUCED BE IMPROVED? Yes, removing both lobes of the caudal fin (tail fin) allows the demarcation of subsistence harvest from commercial harvest of king salmon with greater ease, while decreasing the probability that the skin of the fish will be compromised (increasing the possibility of contamination).

WHO IS LIKELY TO BENEFIT? Subsistence fishers in districts 1-3 would benefit by making the marking of subsistence fish safer and easier.

WHO IS LIKELY TO SUFFER? No one is likely to suffer if this solution is adopted.

### OTHER SOLUTIONS CONSIDERED?

<u>PROPOSAL 159</u> - 5 AAC 05.360. Yukon River King Salmon Management Plan. Amend this regulation as follows:

The effective dates of the windowed schedule would be May 1 to September 1. The windowed

### **UNIT 15: HOLITNA RIVER**

### Background

Location and Land Ownership. The Holitna River management unit encompasses the watersheds of Holitna and Hoholitna Rivers. This is the largest management unit in the planning area, and is nearly al state owned. The land along the Kuskokwim River near Sleetmute is Native owned, and there are three parcels of Native selections near Sleetmute, two of which overlap with state selections. Three small parcels of federal land complete the ownership pattern in the Sleetmute area. The remaining land — over 90 percent of the total area — is state owned. Sleetmute, located at the confluence of the Holitna and Kuskokwim, is the only village in the unit. However, there are approximately 165 parcels of private land in or adjacent to this unit. They are a mixture of Native allotments, and federal homesites, headquarters sites, and trade and manufacturing sites.

Resources and Land Use. The central and northern portions of the unit are broad lowlands; western, southern, and eastern boundaries are defined by the Chuilnuk and Kiokluk mountains, the highlands dividing the Kuskokwim basin from Bristol Bay, and the mountains surrounding Sparrevohn Air Force Station. The upper elevations of these ranges are approximately 4,000 feet. The Holitna and Hoholitna rivers, and the lower Chukowan, Kogrukluk, Shotgun, Taylor, and Titnuk waterways are lined by relatively broad bands of white spruce and hardwood forest that are one-half to two miles wide on each side of the river. Some south-facing hillslopes scattered throughout the unit also support hardwood forest that are one-half to two miles wide on each side of the river. The rest of the lowlands is dominated by black spruce woodlands, grading into shrublands on the upper slopes, and alpine tundra on the highest mountains

The Holitna basin contains the greatest concentration of salmon spawning areas in the entire Kuskokwim drainage and the most productive moose habitat. In addition, these lands support concentrations of bear and waterfowl, and provide winter range for caribou and extensive habitat for furbearers. The fish and wildlife resources of the Holitna basin attract residents of communities from McGrath to Bethel, and sportsmen and guides from throughout Alaska and the continental U.S. The greatest concentration of subsistence activities in the planning area occurs in the Holitna basin. It is used for hunting, trapping, fishing, berry picking, houselog harvest, and firewood collection. It is also the most intensively used part of the basin for sport hunting for moose. Twelve registered hunting guides, six fishing guides, and an unknown number of outfitters use this drainage, targeting moose, caribou, salmon, and sheefish. There are two lodges in the unit, and a third is planned for construction. Salmon from the Holitna drainage provide about 20 percent of the annual salmon harvest for Kuskokwim basin subsistence and commercial fishermen. The king salmon stocks from this and other Kuskokwim drainages are fully allocated at present.

The Holitna basin is rich in other resources as well. The riparian forestlands are among the most productive in the Kuskokwim basin. These forests are highly suitable for settlement and timber harvest for personal and commercial use. The Taylor Mountains and the Kuskokwim Mountains along the western boundary of the unit have moderate to very high mineral potential, a number of existing claims, and two mines that have been active in recent years. Gravel bars in the Kuskokwim River near Sleetmute also have provided materials for local construction projects.

Access. The main access to the unit is by boat on the Kuskokwim, Holitna, and Hoholitna rivers and their major tributaries. Small planes can also land on sections of the Holitna River, numerous lakes, and natural landing areas in the tundra. A public airstrip is maintained at Sleetmute, and there are strips of mining claims at Forty-seven Creek and in the Taylor Mountains. A number of trails cross the unit along major rivers or overland routes into the Kuskokwim Mountains.

### **Management Intent:**

The emphasis of state land management in the Holitna management unit is protection of the fish and wildlife habitat, and support for continued subsistence, commercial, and sport use of these resources. Forestlands will continue to be available for personal and commercial timber harvest. Most of the unit will remain in public ownership, but opportunities for private use of state lands may be made available through a land disposal near Sleetmute, and a land disposal and remote cabin sites along the southern perimeter of the unit and in the Door Mountains. The remote cabin sites and land disposals are located to offer sites that can support private recreation and settlement, while avoiding the main public use areas and most important habitat lands. Land disposal offerings total approximately 3,600 acres of land and there are 56 remote cabin sites.

Most state lands will remain open to mineral entry. However, to protect important salmon populations, spawning beds and rearing areas in known mineralized zones will be closed to new mineral entry. Closures include portions of Portage, Bakbuk, Mukslulik, Taylor, Kiknik, and Chuilnuk creeks, a portion of the Gemuk River, Gemuk Lake, part of an unnamed tributary to the Holitna between Bakbuk and Portage Creeks, and an unnamed tributary of the Hoholitna in the Door Mountains. Uplands along the Gemuk River, Gemuk Lake, Mukslulik Creek and unnamed tributaries of the Holitna and Hoholitna river drainages will be subject to leasehold location requirements to ensure compatibility of mining with salmon spawning and king salmon rearing areas.

In addition to state-owned uplands, the beds of the Kuskokwim, Holitna, Hoholitna, and other navigable waters are state owned and are subject to the guidelines of this plan.

#### Subunit 15a - Holitna-Hoholitna Corridors

Subunit 15a contains the main stems of the Holitna and Hoholitna rivers, the core of the Holitna basin. It receives more use for subsistence and sport hunting for moose than any other subunit in the planning area, and is important for salmon spawning, and harvest of salmon and resident fish. The Department of Fish and Game's only Kuskokwim weir for estimating the size of salmon runs is located at Kashegelok in the southern part of the subunit. The forests along the rivers are the most productive in the Holitna basin, and some of the best in the entire planning area. This subunit is state owned except for a number of Native allotments along the river. Three permits for trapping cabins have been issued within the subunit. Subunit 15a is accessible by boat and small plane.

The Holitna and Hoholitna Corridors will be kept in public ownership and managed to protect the fish and wildlife habitat and populations, and to support continued use of these resources. The forest lands will be managed to provide timber for personal and commercial and timber harvest. Other uses of this land are permitted when compatible with the primary intent of protecting the fish and wildlife resources. Most state lands in this subunit will remain open to new mineral entry; however, portions of Whitewater Creek, Kiknik Creek, and from unnamed tributaries to Kiknik Creek will be closed to protect salmon rearing areas.

In recognition of the outstanding habitat, forestry, and human use values of this area, it is also recommended that the legislature consider designating it as a state Public Use Area. The Public Use Area would contain subunit 15a and the adjacent portions of subunits 15b and 15c that are rated A-2 ("special value") habitat (see in Appendix A). This designation would be intended to keep these lands in permanent public ownership; protect the fish and wildlife habitat; promote forest management; and ensure that fish, wildlife, and forest resources continue to be available for personal and commercial use. Other uses will be allowed whenever compatible with the intent to protect and manage habitat and forest resources. The Public Use Area would be managed by DNR under a management plan prepared with the concurrence of the Department of Fish and Game.

RC 117

IF A REGULATION IS ADOPTED PROHIBITING UNRESTRICTED MESH SIZE GILLNETS IN THE YUKON AREA DIRECTED COMMERCIAL CHINOOK SALMON FISHERY:

- 1. Yukon Delta Fisheries Development Association (YDFDA) requests that the regulation becomes effective commencing with the 2010 summer fishing season IN THE LOWER YUKON AREA (Districts 1, 2, and 3)
- 2. YDFDA will provide for the replacement of all nets that are larger than the allowed maximum mesh size and used in the Lower Yukon Area Directed Commercial Chinook salmon fishery.

Ragnar O. Alstrom

This refers to Proposals:81-99



During Committee C meeting the Chairman asked for new information. Since I provided testimony stating support or opposition to each proposal during public testimony, I believed that it was unnecessary to provide the same testimony at the Committee C meeting. Therefore, I remained silent regarding most of the proposals. The Lower Yukon AC did not submit any proposals. However, we want to reiterate our support and opposition to the following proposals.

The Lower Yukon Advisory Committee supports PROPOSALS 81 AND 98

The Lower Yukon Advisory Committee OPPOSES PROPOSALS 83-86, 88-97 AND 99

Additionally, the Lower Yukon Advisory Committee tabled PROPOSALS 82 AND 87

Stanislaus Sheppard

Acting Ac Chair

Lowor Yokon AC

The public panel recommendation wording is not reflected in the substitute language:

We recommend the following:

Gene Sandone Tack Schulthois

(i) When king salmon subsistence fishing is restricted <u>or intended to be restricted in most or all of</u>
[more than one the] the districts or portion of a district, the commissioner may, by emergency order, close a fishery and reopen a fishery during which king salmon taken may be retained but not sold

RC 120

### Alaska Board of Fisheries Committee Report

# **COMMITTEE C**

Yukon Area Salmon and Freshwater Fish January 28, 2010

Publicly distributed copies of the original Committee C Alaska Board of Fisheries Committee Report had an error in Proposal 89, page 21.
The board committee recommendation was listed as "consensus to oppose".
The correct recommendation was "no consensus."

## **RC 121**

### Alaska Board of Fisheries Committee Report

# **COMMITTEE C**

Yukon Area Salmon and Freshwater Fish January 28, 2010

Amended substitute language for proposal 94 found on page 35 of the original committee report RC 78:

5 AAC 05.360. Yukon River King Salmon Management Plan. Amend (h)

(h) If preseason or inseason run assessment information indicates insufficient abundance of king salmon to meet escapement objectives on specific components of the run, the commissioner may, by emergency order, close all salmon fishing in a district or portion of a district.

# Alasky Board of Fisherie RC1. Committee C January 28, 2010

MARTIN B. MORREST Public Panel Member Representing Wade HARPHON GARGE DISTRICT oppositing reallocation proposal # 95,96 and 97 Pages C., Evolosed Find, Letter Dated Jan. 06, 2010 To Meriaine Knise USDA Director Community Program - Past Values - 41, 2,3 - Commercial Fishermen income \$158 million Dallars
Appendix A12 - Values Chinook, Chum, Fall Cham and Colo page 1 Exhibit A Commercial Chinook Harvest (3)Disasterous Commercial Fishing Document 41,2,3 year 2003, 2004, 2005 and 2006 (H)

Note Reallocating 11,2,3 could be MAN MAde Disaster So Ever Coughtron Should be MADE



## City of Emmonak

P.O. Box 9, Emmonak, Alaska 99581 (907) 949-1227 • (907) 949-1249 • Fax (907) 949-1926

Merlaine V. Kruse
Director, Community Program
800 West Evergreen, Suite 201
Palmer, Ak 99645-6539

Date: January 6, 2010

Dear Merlaine V. Kruse,

I am writing this letter to inform all parties concerned on the progress and development of the ARRA stimulus funding that has become available to the City of Emmonak for the purpose of the new landfill site and closure of the existing landfill.

The staff at the Rural Development office in Palmer has been extremely helpful in all aspects of securing the grant funding that will help stimulate the local economy in this time of economic downturn. The critical aspect of this process has been that the City will be able to manage and control its own project development.

In many cases communities have little or no say in the planning, funding and development of projects that have direct impacts in the community. USDA Rural Development has given us the opportunity to take on ownership of our new facility which will help instill a sense of pride and workmanship in the local labor force.

The timing of the ARRA Stimulus Funding could not come soon enough for the City of Emmonak, with recent downturns in the economy and the closure and cut backs of multiple employment opportunities there is a sense of urgency in relief for the unemployed.

The entire process of receiving the Stimulus Fund Package may not have been possible if not for the continued support and management efforts put forth from staff at USDA Rural Development office in Palmer. The direct hands-on support that was received from Alaska Rural Water Association Circuit Riders was also a crucial aspect in securing the stimulus funding for the new landfill. The ARWA Circuit Riders in cooperation with the Rural Development staff were also able to secure additional funding for the repairs and upgrading to the City's Water/Waste System.

I want to emphasize to you and to your staff how encouraging it has been to all communities that your ideas encourage and promotes integrity and the pride of our citizens. It helps us to strive for economic independence and preserve the sensitivity of our tradition. The community recognizes the transfer of funds is needed to abate the strong impacts of disastrous fishing seasons. It must seek to replace lost economic value with development of other work producing industry.

Fishing is a basic sector economy in our area because it has provided for cash income for a large group of our residence. The loss of fishing income has not only eroded our economic base but also threatened survival of our communities. For many years commercial fishing was an economic activity that opened opportunity for residence to support and supplement as subsistence lifestyle. The following discussion intends to underscore the importance of fishing in our area. It will describe our community, the area's fishing history, the current difficult situation and the grim outlook.

Government data compiled by the Alaska Department of Fish and Game, the Commercial Fisheries Entry Commission and the Department of Labor and Workforce Development confirm the severity.

Past values of commercial salmon to area fishers are the following but now are depressed to no more then 3.5 million per year since 2000

A12 Chinook	1977-1999	\$103,988,886
A12 Summer Chum	1977-1999	\$39,306,536
A12 Fall Chum	1977-1999	\$12,290,904
A12 Coho	1977-1999	\$3,349,194

Total 1977-1999 Commercial Fisherman Income	\$158,838,080
23 year average Commercial Fisherman Income	\$6,906,003

The Chinook Salmon industry was a viable commercial income for local individual fisherman totaling 104 million dollars 1977-1999

Chum and Coho salmon used to be targeted commercial fish species in the Wade Hampton Census Area in past healthy market environment. Between 1977 and 1999 the Yukon commercial fisherman earned approximately \$55 million from the above mentioned salmon species. The market for commercially caught wild chums and cohos form our area has ended. In general, the glut of hatchery fish and farmed fish has saturated world demand and it is unlikely that our Chum and Coho fishery will regain its former commercial value. As mentioned before, this economic loss amounts to \$55 million.

The local commercial fleet earned approximately \$159 million, this translates to local earnings of about \$6.9 million per year. As seen in attached tables the commercial take deteriorated in 1998 and 2000 and its value was seriously impaired. The 2001 commercial fishery was cancelled because of the dismal return of fish.

It is estimated that flash-freezing fish processing companies generated over \$275 million in sales from the all-species commercial catches, the approximate commercial processor earnings 1977-1999 averaged \$8.7 million per year.

The lack of commercial fishing also compounded the problems of chronic unemployment and under employment in our area. Harvesters, their crew, fish tender captains and seafood processing workers are idled and suffer substantial income losses from the harvest failures. There is little hope that these workers will become employed by other industries because jobs in our area, in general, are scarce.

Labor statistics cannot capture the full dimension of the recent fishing disasters because their employment counts do not include self-employed harvesters and their crews, who typically receive a percentage of the value of the catch. However, seafood-processing crews are part of the wage and salary work force. Between 1990 and 2000 those workers earned \$6,483,569, an average of nearly \$590,000 per season. During the peak month in July in many years over 250 workers were employed. In addition, these seasonal workers became eligible for unemployment benefits during the off season. Between 1996 and 2000 regional seafood workers received \$246,818 in unemployment insurance benefits. The plight of no commercial fishing activities means the entire seafood industry income is lost.

The indirect impacts of the fishing disaster stretch to retail, services and transportation industries, simply because the resident commercial fleet and other seafood industry workers have very little cash to spend. Moreover, the fishing fleet cannot maintain its assets because it cannot rely on cash advances from the processors because the viability of future fishing income has become uncertain. Public entities suffer as well from the loss of raw fish tax revenue. Amounts received in past years were substantial.

It has been recorded that the most recent outlook for commercial fisheries remains bleak. It is uncertain if subsequent runs will support commercial harvests. However, it is certain that the subsistence will take subside. Even if fish runs regain their former strength, the economic value will not rebound to its former heights because of increased competition in salmon markets. The attached escapement tables document the volatile conditions regarding future fish runs.

Commercial Fishing industry will never return to its normal profitable status in any foreseeable time.

The best known Yukon Chinook Salmon market will now fluctuate and stagger for the next 20 years or even more.

This economic losses because of the fishing disaster will mount in future years. Uncertainties in the recovery of fish runs must be considered. Realistically, our community cannot expect to replenish or replace the lost income from commercial fishing because of our region lacks a substitute emerging economy.

Our community and other Wade Hampton census area subsistence and commercial fisherman have already experienced heavy losses from HAD BEEN \$104 Million commercial fishery income from 1977-1999. The 1998, 1999, 2000 and 2001 devastation brought in the alarming statistic for this only economic base we had for years.

The ripple effect on the municipalities, retail establishments, transportation services, will continue to equate suffering as a result of all these consequences as severity of the Declaration of Western Alaska Fishery continues.

The capital projects that are listed in the recovery plan cannot replace perpetual income, although they help to alleviate the problem. Capital construction usually is a short-term activity that will subside at the completion of a project. Our current situation clearly shows that our economy already is cash starved and it is becoming smaller, while our population is growing. This means that the communities in the area will suffer severe cash shortages in future years.

In closing, let me reiterate that we want your help to do all that is necessary to release the capital improvement funds for our area from the Federal Government and State Government. If necessary, please consider special legislative exemptions to release these funds directly to the cities to manage "force account" projects. This will give us the opportunity to create much needed local employment to offset the economic losses resulting from the collapse of the salmon fishery.

Respectfully and cordially yours,

Martin B. Moore S

City Manager

City of Emmonak

Copy: Jean Mason- Grants Administrator, State of Alaska Shelly Andrew, City Attorney Enclosures

# Appendix A12 Value of Commercial Salmon to Yukon Area Fishermen Page 1

		ninook	
er P	Lower Yukon	Upper Yuko	
Year	Value	Value 	Subtotal
1977	1,841,033	148,766	1,989,799
1978	2,048,874	66,472	2,115,146
1979	2,783,433	124,230	2,877,663
1980	3,409,105	113,652	3,522,767
1981	4,420,669	206,380	4,627,049
1982	3,769,107	162,699	3,930,805
1983	4,093,562	105,584	4,199,148
1984	3,510,923	102,354	3,613,277
1985	4,294,432	82,644	4,377,076
1986	3,165,078	73,363	3,238,441
1987	5,428,933	136,196	5,555,129
1988	5,463,800	142,284	5,806,084
1989	5,181,700	108,178	5,289,878
1990	4,820,859	105,285	4,928,154
1991	7,128,300	97,140	7,225,440
1992	9,957,002	168,999	10,126,001
1993	4,884,044	113,217	4,997,261
1994.	4,169,270	124,270	4,293,540
1995	5,317,508	87,059	5,404,587
1996	3,491,582	47,282	3,538,864
1997	5,450,433	110,713	5,561,146
1998	1,911,370	17,285	1,928,655
1999	4,950,522	74,475	5,024,997
5 Year Av	_		
1994-1998	4,068,033	77,322	4,145,354
1997-1999	23 Year Total		103,988,88
1990-1999	10 Year Total		53,026,62

Appendix A12 Value of Commercial Salmon to Yukon Area Fishermen Page 2

Summer Season						
	Summer Chum					
	Lower Yukon	Upper Yukon		Total		
•	Value	Value	Subtotal	Season		
1977	1,007,280	305,481	1,313,761	3,303,580		
1978	2,071,434	655,738	2,727,172	4,842,318		
1979	2,242,584	444,924	2,887,488	5,575,151		
1980	1,027,738	627,249	1,654,987	5,177,754		
1981	2,741,178	899,876	3,441,054	8,068,103		
1982	1,237,735	452,837	1,690,572	5,621,378		
1983	1,734,270	281,883	2,016,153	6,215,299		
1984	926,822	382,778	1,309,698	4,922,975		
1985	1,032,700	593,801	1,626,501	8,003,577		
1986	1,748,455	634,091	2,380,546	5,618,987		
1987	1,313,618	323,611	1,837,229	7,202,358		
1988	5,001,100	1,213,991	6,215,091	11,821,175		
1989	2,217,700	1,377,117	3,594,817	8,884,695		
1990	497,571	506,611	1,004,182	5,930,336		
1991	782,330	627,177	1,409,477	8,834,917		
1992	606,876	525,204	1,132,180	11,258,181		
1993	226,772	203,762	430,534	2,427,795		
1994	79,206	396,685	475,891	4,769,431		
1995	241,593	1,060,322	1,301,920	6,706,487		
1996	89,020	966,277	1,055,297	4,594,161		
1997	58,535	96,806	153,341	5,714,487		
1998	26,415	821	27,236	1,985,891		
1999	19,687	1,720	21,407	5,046,404		
5 Yea	r Average	· · · · · · · · · · · · · · · · · · ·		····		
	98,555	504,182	602,737	4,748,091		
1977-	1999 23 Year	Total	<u>,</u>	39,306,536		
1990-	1999 10 Year	Total		7,011,465		

Appendix 12A Value of Commercial Salmon to Yukon Area Fishermen
Page 3

		Fall Chum	
	Lower Yuko	on Upper Yul	<u>kon</u>
	Value	Value	Subtotal
1977	218,571	102,170	820,741
1978	691,854	103,091	794,945
1979	1,158,485	347,814	1,506,299
1980	394,162	198,088	592,250
1981	1,503,744	356,805	1,860,549
1982	846,492	53,259	899,750
1983	591,011	128,950	719,961
1984	374,359	103,417	477,776
1985	634,616	179,125	812,741
1986	399,321	30,309	429,830
1987	0	0	0
1988	838,700	151,300	790,000
1989	713,400	223,996	937,996
1990	238,165	174,985	413,130
1991	438,310	157,831	596,141
1992	0	54,161	54,161
1993	0	0	0
1994	0	8,517	8,517
1995	185,038	167,571	352,607
1996	48,579	45,438	94,017
1997	86,526	7,252	93,778
1998	0	Ö	. 0
1999	35,639	876	38,515
5 Year A	verage		
	64,028	45,756	109,784
1977-19	99 23 Year Total		12,290,904
1990-19	99 10 Year Total		1,648,866

in the second

Appendix 12A Value of Commercial Salmon to Yukon Area Fishermen Page 4

Fall Season						
Company or the Company	<u>Coho</u>					
Lowe	r Yukon Upr	er Yukon		Total	Total	
	Value	Value	Subtotal	Season	Value	
		· · · · · · · · · · · · · · · · · · ·			'	
1977	140,914	2,251	143,165	963,906	4,267,466	
1978	86,823	6,105	102,928	697,873	6,740,191	
1979	83,466	6,599	90,065	1,596,384	7,171,515	
1980	17,374	2,374	19,748	611,99	5,789,752	
1981	87,385	4,568	91,953	1,952,502	10,020,605	
1982	135,828	18,788	154,614	1,054,354	6,675,742	
1983	17,497	11,472	28,959	748,930	6,934,229	
1984	256,050	12,823	268,873	746,649	5,669,624	
1985	176,254	28,797	203,051	1,015,792	7,019,368	
1986	211,942	556	212,498	642,128	6,261,115	
1987	0	0.	0	0	7,202,358	
1988	734,400	34,116	. 468,516	1,558,518	10,349,891	
1989	323,300	33,959	357,259	1,294,655	10,179,350	
1990	137,302	37,026	174,328	587,458	6,517,794	
1991	300,182	21,556	321,738	817,879	9,562,796	
1992	0	19,529	19,529	73,690	11,331,871	
1993	· 0	0	0	0	5,427,795	
1994	0	8,739	8,739	17,256	4,786,887	
1995	80,019	11,292	91,311	443,918	7,150,405	
1996	96,795	13,020	109,815	203,832	4,797,993	
1997	79,973	1,062	81,035	174,813	8,839,300	
1998	0	0	0	0	1,955,891	
1999	3,620	0	3,620	40,135	5,086,539	
	h. Alfahara jagungan ara-					
5 Yea	r Average					
51,35	•	823	•	7,964	4,916,055	
	1999 23 Ye		3,251	•	158,838,080	
1990-1999 10 Year Total			810	),115	62,497,071	

### Exhibit A

Table 5. Alaskan catch of Yukon River Chinook salmon, 1961-2000

	Estimated		Harvest		•
	Subsistence				
Çar	Use(a)	Subsistence(b)	Commercial(C)	Sport(d')	Total
961	21,488	21,488	119,664		141,152
962	11,110	11,110	94,734		105,844
	24,862	24,862	117,048		141,910
964	16,231	16,231	93,587		109,818
965	16,608	16,608	118,098	•	134,706
966	11,572	11,572	93,315		104,887
967	16,448	16,448	129,656		146,104
968	12,106	12,106	106,526		118,632
969	14,000	14,000	91,027		105,027
970	13,874	13,874	79,145		93,019
971	25,684	25,684	110,507	i	136,191
972	20,258	20,258	92,840		113,098
973	24,317	24,317	75,353		99,670
974	19,964	19,964	98,089		118,053
975	13,045	13,045	63,838		76,883
976	17,806	17,806	87,776		105,582
977	17,581	17,581	96,757	156	114,494
978	30,297	30,297	99,168	523	129,988
979	31,005	31,005	127,673	554	159,232
980	42,724	42,724	153,985	956	197,663
	.29,690	29,690	158,018	769	188,477
982	28,158	28,158	123,644	1,006	152,808
983	49,478	49,478	147,910	1,048	198,436
1984	42,428	42,428	119,904	351	162,683
1985	39,771	39,771	146,188	1,368	187,323
1986	45,238	45,238	99,970	796	146,004
1987	53,124	53,124	134,760	502	188,380
1988	46,032	46,032	101,445	944	148,42
1989	51,062	51,062	105,491	1,053	157,600
1990	51,594	51,181	97,708	.544	149,43
1991	48,311	46,773	107,105	773	154,65
1992	46,553	45,626	122,134	431	168,19
1993	66,261	65,701	95,682	1,695	163,07
1994	55,266	54,563	115,471	2,281	172,31
1995	50,258	48,934	126,204	2,525	177,66
1996	43,827	43,521	91,890	3,151	138,56
1997	57,060	56,291	116,421	1,913	174,62
1998 1998	54,171	54,090	44,625	654	99,369
1999 1999	52,699	52,525	69,592	h	122,08
2000 g	J∡,O≯Y h	ئىدىمى h	9,115	h ·	9,115
Average			- 7		
1961-89		27,102	109,866	771	137,31
1990-99		51,921	98,680	1,552	151,99
	51,603	51,072	89,740	2,061	142,46

a Includes salmon harvested for subsistence purposes, and an estimate of the number of salmon carcasses harvested for the commercial production of salmon roe and used for subsistence. These data are only available since 1990.

b Includes salmon harvested for subsistence and personal use.

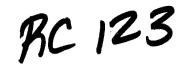
g Includes ADF&G test fish sales, fish sold in the round, and estimated numbers of female salmon commercially harvested for the production of salmon rou (see Bergstrom et al. 1992:1990 Yukon Area AMR).

d Sport fish harvest for the Alaskan portion of the Yukon River drainage (see Shultz et al. 1993: 1992 Yukon Area AMR).

f Includes 653 and 2,136 chinook salmon illegally sold in District 5 and 6 (Tanana River), respectively.

g Data are preliminary.

h Data are unavailable at this time.



We support Committee C's Board Committee Recommendations as follows:

OPPOSE proposals 83, 85, 86, 89, 90, 98 and 99.

SUPPORT proposals 87, 199 and 100

We would also like to supply the Board with new information on four specific proposals.

### **New Information:**

### Proposal 88 - Prohibit drift gillnet gear for subsistence and commercial fishing

Currently commercial and subsistence driftnets are restricted to 50 fathoms maximum in length. If we are restricted to set nets, you will actually increase a fisherman's gear length and they will be allowed to fish up to 150 fathoms (3 nets @ 50 fathoms each) and there will be no depth restrictions for Subsistence users. With so many potential set netters you increase the safety concerns due to weather and you will also increase the potential for many more fishermen to use the 3 mouths of the Yukon (North, Middle and South), as fishing the tides will be the most efficient areas to fish.

### Proposal 95 – Reallocate commercial king salmon harvest

If more chinook are reallocated to the upper districts, above Tanana, that will increase the harvest on Canadian origin stocks (known that 70% and higher are bound for Canada). (Reminder that the Canadian component in the lower river is on average 50%, and so for every fish that "saved" for Canada, the lower river had to give up 2 fish and the upper river only 1.)

### Proposal 96 – Reallocate commercial summer chum salmon harvest

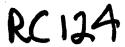
If a reallocation occurred for summer chum, it would lead to an over escapement problem in the Anvik River (due to harvests halted in the lower river districts) and it could further reduce the value of the overall summer chum markets.

### Proposal 92 – Prohibit sale of king salmon during non-king salmon directed fisheries

Need to clarify that the "normal" subsistence windows we have been under since 2001 (e.g. 2 36-hour openers per week in Y-1), which we consider restrictions, do not constitute a restriction in the substitute language from Committee. It is only when there are cuts further to those windows.

Erik Wewgarth ST. Marys

St. Mary's



## Public Testimony signup sheet AYK BOF January 26 – 31, 2010

Page 1 Tuesday, January 26, 2010

#	Name	Affiliation Sub	ject matter	RC#	
1	Paul Shewfelt	Fort Yukon Fishermen	Upper Yukon fishing		
2	Cliff Adams	self	Yukon Flats subsistence sa	lmon	
3	Kyle Wiehl	self	Subsistence fishing		
4	Clayton Tackett	Gwichyaa Zhee Gwichin Tribal G	ov't Upper Yukon closures		
5	Myron P.Naneng, Sr.	Assn. of Village Council Presiden	ts BOFProcess/conservation/r	ngmnt	
6	Alexis Walters	self	Way of my life		
7	Isidore Shelton	Alakanuk Native Corp.	Comments on Proposals		
8	John Riley	self	Proposal #88		
9	Michael James	City of Alakanuk	Yukon Area proposals		
10	Raymond Oney	Joint Committee Rep	Props 66-67, 81-100 RC14	ļ	
11	Percy Herbert	self	Bycatch in Pollock fishery		
12	Virgil Umphenour	self	proposals		
13	Wes Jones	Norton Sound Economic Dev Cor	p NS action plans, Proposals	SubD 3, 5&6	
14	Kevin Keith	NSEDC	Props 73, 75, 77/ Port Clare	ence fishery	
15	Charlie Lean	NSEDC	Pt Clearance F.,Niukluk EG	, NS Herring	
16	Mike Kramer	self	6" mesh in Yukon; Volkmar	and Minto pike	
17	Philip Titus	YRDFA	YR salmon, Tanana tributar	y fishing	
18	George Yaska	self	Yukon Chinook		
19	Adlai Alexander	EIRAC	Subsistence fishing		
20	Richard Burnham	Middle Yukon AC			
21	Joseph J. Sheppard	Lower Yukon	Proposal 88		
22	Jeremy Charlie	Minto-Nenana AC	Minutes of M-N-A-C		
23	Raphael Jimmy	self	Yukon River Proposal	RC30	
24	Carl A. Walker	Yukon Delta Fisheries Dev. Associ	c. mesh proposals, season da	tes	
25	Andrew Firmin	self	proposals, and lack of fish	proposals, and lack of fish	
26	Evan Charles	self	Lower Yukon fishing restrict	ions	
27	Joseph G. Stronghea	nt self and Nunam Iqua	Drift netting		
28	Billy Charles	self	Reallocation of commercial	harvest	
29	Glenda Agayar	self	Lower Yukon mesh size, wii	ndows	
30	Aloysius Unak	self	Lower Yukon proposals		
31	Elena Sergie	self	Lower Yukon proposals		

# Public Testimony signup sheet AYK BOF January 26 – 31, 2010

Page 2 Tuesday, January 26, 2010

#	Name	Affiliation	Subject matter	RC#
32	John Thompson, Sr.	self	Lower Yukon proposals	
33	Philip Covlasky	self	89, 90, 91-94, Reallocating	
34	Dominie J. Hunt	self and YDFDA	proposal comments	i
35	Malora Hunt	self	Lower Yukon fisheries	
36	Mike Smith	self and Tanana Chiefs Confe	rence Yukon proposals	
37	Leslie Hunter	Lower Yukon		
38	Fred Beans	self, and Mountain Village	Lower Yukon Proposals	
39	Victor W. Lord	Tribal Council of Nenana (?)	Statement on King salmon,	prop comment
40	Max Agayar	self		
41	Stanislaus Sheppard	self and Mountain Village(?)	Lower Yukon proposals	
42	Isaiah Charles	self	Lower Yukon proposals	
43	Marilyn Charles	self	Lower Yukon proposals	
44	Stephan Charles	self	Traditional knowledge of su	ubsistence
45	Margie Walker	self and Community of Graylin	g Proposal 90	
46	Angela Demientieff	self and Village of Holy Cross	Proposal 88	
47	Jill Klein	YRDFA	Yukon proposals	
48	Bill Alstrom	YRDFA	Yukon proposals	
49	Becca Robbins Giscl	air YRDFA	Yukon proposals	
50	Patricia Salmon	self	Salmon in Chalkyitsik	
51	James Kelley	self	Yukon Flats	
52	Joe Matesi	self	Proposals	
53	Bradley Jonas	self	Salmon in Chalkyitsik	
54	Timothy Gervais	W. Interior RAC and Ruby AC	Yukon salmon, little bit on l	Kusko
55	Frank Downey	Upper Kobuk AC	Proposal 68	
56	Enoch Mitchell	Noatak / Kivalina AC	Proposal 68	
57	Jack Fagerstrom	Northern Norton Sound AC	Proposals 54, 70, 71, 73-8	0
58	Charles Paukan, Sr.	self (from St. Mary's)		
59	Larry Nathaniel	self	Chinook salmon	
60	Reggie Barr	self, and Brevig Mission	Props 73 and 75	

### Public Testimony signup sheet AYK BOF January 26 – 31, 2010

Page 3 Wednesday, January 27, 2010

#	Name	Affiliation Su	ubject matter	RC#
61	Ragnar Alstrom	Yukon delta Fisheries Dev. Ass	oc. Yukon proposals	
62	Simeon Harpak, Sr.	self (from Mt. Village)		
63	James C. Landlord	self (from Mt. Village)		
64	Doug Bowers	self	Yukon propsals 83	
65	Leroy L. Peters	for Holy Cross ?YRDFA?	•	ageluk, Russian Mssn.
66	Macarthur(?) Tritt	self (from Venetie)	subsistence fishing	on Yukon
67	Norbert Beans	Algaaciq Tribal Council	Proposals 88-97	
68	Simon Matthews	self (from Stevens Village)		
69	Harry Wilde	YDFDA	Subs and commerc	cial fishing, Y1,2,3
70	Gene Sandone	YDFDA	proposals 194 and	199
71	Ethan Burkholz	self	Props 58,59 Fieldir	ng Lake lake trout
72	Timothy Andrew	self	Props 88, 89, 90	
73	Stan Zuray	Tanana Rampart Manley AC	King Salmon	
74	Stan Zuray	self	King Salmon	
75	Kathleen Zuray	Tanana Tribal Council	King salmon	
76	Faith Peters	self	King salmon	
77	Lester Wilde	Yukon Kuskokwim RAC	Proposals 81-99	
78	Erik Weingarth	self	Prop 95, and drop	off from small mesh
79	Emmanuel Keyes	self/Kotlik subs and comm fishe	rs Allocations	
80	Marvin Okitkun	self	Prop 90-98	
81	Paul Johnson	Southern Norton Sound AC	Proposals 69, 72, 7	76, 77, 78.
82	Norm Phillips, Jr.	self	Proposals 87,89, 9	0.
83	Elias Kelley	self	Yukon River, Pilot	Station
84	Bill Derenoff	self	subsistence kings	
85	Ellen Keyes	self	Yukon proposals	
86	Humphrey Keyes	self	Yukon proposals	
87	Howard Luke	self	(from Chena)	
88	Wilma Pitka	self	(from Beaver)	
89	Thomas R. Maillelle	self	Drifting	

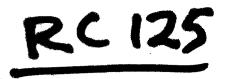
# Public Testimony signup sheet AYK BOF January 26 – 31, 2010

Page 4 Wednesday, January 27, 2010,

#	Name	Affiliation	Subject matter		RC#
90	Francis Thompson	self (from St. Mary's)	Yukon p	roposals	
91	Russell Wood	self	Yukon K	ling fishery	
92	Martin Kelly	Pilot Station Traditional Cour	ncil Prop 95		
93	Jennifer Hooper	self	Chinook	bycatch, cus	tomary trade
94	Jack Schultdeis	KwikPak Fisheries	Yukon p	roposals	
95	Kenneth Lee	self	95, 96, 9	97	
96	Pat Madros	self	King salı	mon	
97	Bonnie Williams	self	Yukon fi	sh	
98	Thomas Alstrom	self	Yukon D	elta Fisheries	3
99	(duplicate )				
100	Martin Alexie	self, and for Mountain Village	)		
101	Steve Ginnis	self	Yukon ri	ver fish	
102	Ted Suckling	self	Pollock,	sustainability	
103	Nicholas C. tucker, S	r. self, family, community	Yukon p	roposals, sub	s/comm. Fisheries
104	Michael Sloan	Kawerak, Inc. Propo	sals 68,69, 71-80	) Pilgrim R sto	ocks of concern
105	Charles Saccheus	Native Village of Elim	Subsiste	ence way of lif	<sup>f</sup> e
106	Morris Nassuk	Native Village of Koyuk	Support	proposal 69	
107	Anna Pratt	Yupiit of Andreafski	Lower Y	ukon	
108	Maxine Agayar	self (from Alakanuk)			
109	Louis Green	Sitnasuak Native Corp and N	lome Eskimo Co	mmunity	68-71, subsistence
110	Sven Paukon	self			
111	Benjamin Kamkoff	self and YDFDA	F	Proposal 89	
112	Tim McManus	self			
113	Mary Keyes	self	L	ower Yukon o	concerns
114	Frank Alstrom	self	Υ	∕ukon Propos	als
115	Andy Bassich	Eagle AC	k	King Salmon o	conservation
116	Andrew Firmin	self, and Eastern Interior RA	С		
117	Mike Kramer	Fairbanks AC (together with	V. Umphenour)		
118	Ken W. Chase	G A S H AC	Υ	/ukon River p	roposals 81-99
End					

# STATE OF ALASI

### DEPARTMENT OF FISH AND GAME **Boards Support Section**



SEAN PARNELL, GOVERNOR

1255 W. 8TH Street P.O. BOX 115526 JUNEAU, AK 99811-5526

PHONE: (907) 465-4110 FAX: (907) 465-6094

### MEMO

TO:

Vince Webster, Chair

Alaska Board of Fisheries

Cliff Judkins, Chair Alaska Board of Game DATE:

January 31, 2010

SUBJECT: Petition to Joint Board of

Fisheries and Game from

the Alaska Wildlife Alliance re AC regulations

FROM: Jim Marcotte, Director

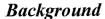
**Boards Support Section** 

Alaska Department of Fish and Game

### Action Requested

A petition from the Alaska Wildlife Alliance dated January 11, 2010 was submitted to the Joint Board of Fisheries and Game. The petition seeks six specific actions:

- 1) that the Board of Fisheries and Board of Game meet jointly as the Joint Board to act on the petition,
- 2) that the Joint Board remove all the individuals elected onto the Anchorage Fish and Game Fish and Game Advisory Committee during its January 5, 2010 meeting,
- 3) that the Joint Board designate seats by user group for the Anchorage Fish and Game Fish and Game Advisory Committee,
- 4) that the Joint Board adopt regulations to provide user group representation on advisory committees statewide.
- 5) that the Joint Board repeal 5 AAC 96.060(e)(3) which provides for electing advisory committee members by the public in attendance at advisory committee meetings and adopt new regulations to provide for membership by appointment from the Commissioner of Fish and Game, and
- 6) that the Joint Board adopt new election procedures if direct elections are maintained.



The petition asserts that there were numerous problems with the January 5, 2010 election for seats on the Anchorage Fish and Game Advisory Committee. The petition asks that Anchorage Fish and Game Advisory Committee members elected on January 5, 2010 be removed because of alleged problems with the room size, distribution of ballots, a lack of consideration of user group representation, voting by non-residents, and a lack of safeguards preventing individuals casting multiple votes.

The petition also asserts that there are problems with the current rules for advisory committee elections. The petition asks that the Joint Board adopt new regulations to prohibit individuals from voting in more than one advisory committee election, guarantee proportional representation of all interests in each community, and delete the provision for electing members by a majority vote.

The advisory committees regulations (5 AAC 96, 5 AAC 97, and 5 AAC 98) were established by the Joint Boards of Fisheries of Game under authority found in AS 16.260. The specific regulations describing the uniform rules operations are found in 5 AAC 96.010 and the section on committee elections is found in 5 AAC 96.060(e)(3).

### Discussion

The Joint Board Petition Policy (5 AAC 96.625) was developed by the Board of Fisheries and Board of Game and describes the standards for addressing petitions submitted to either of the two boards. This petition asks for action by both boards acting jointly. Specifically, it seeks the removal of recently elected advisory committee members and the modification of advisory committee regulations on election procedures. Holding a joint meeting to consider these actions would be at the discretion of the two boards.

Specific elements of the petition are addressed below.

### 1) Convening a Joint Board meeting.

Convening a Joint Board meeting would be at the discretion of the two boards. If both boards found a basis for holding a joint meeting, the scope of topics to be considered should be identified well in advance of the meeting to facilitate public participation. In scheduling the October 2007 Joint Board meeting, over a year was needed to identify which topics to include, allow time for proposals to be submitted, and allow time for public review and comment.

# 2) Removing recently elected members of the Anchorage Fish and Game Fish and Game Advisory Committee.

The two boards acting jointly would need to find a basis to rescind the results of the January 5, 2010 election. The election turnout was greater than previous election meetings of this committee. A total of 527 ballots were cast and six regular and two alternate seats were filled. A variety of stakeholder groups organized in advance of the meeting and promoted their own slate of candidates. Department staff compiled a list of voter names and addresses and found

that none of the voters resided outside the area of committee jurisdiction as specified in 5 AAC 96(e)(3) and 5 AAC 97.005. Department staff found no evidence that individuals obtained multiple ballots or cast multiple votes. The activities identified on the new member forms from the Anchorage Fish and Game Advisory Committee indicate that the committee contains representation of at least three user groups, as recommended in the regulations.

# 3) Designating user group seats for the Anchorage Fish and Game Fish and Game Advisory Committee.

The Joint Board has the authority to assign seats to represent a specific *user group* or specific *community* (see 5 AAC 96.060(e)(1)). To date, it has only assigned seats by *community*.

Note that three advisory committees have acted to develop their own internal policies on user group seats, including the Juneau-Douglas AC, Kenai-Soldotna AC, and Kodiak AC. These committees have found that this approach has alleviated problems with a single user group creating an imbalance in committee make up. Having these informal internal policies has allowed these committees to maintain a balance of memberships consistent with the interests present in the area, and has allowed the committee to make adjustments without having to wait for Joint Board action.

# 4) Adopting regulations to provide user group representation on advisory committees statewide.

There is no "one size fits all" solution. For example, a committee in a coastal fishing community may need representation from a variety of gear groups such as drift gillnet, set gillnet, purse seine, subsistence, charter, and sport fishing along with hunting, trapping, and non-consumptive use. A committee composed of villages in western Alaska would need representation from a different mix of hunting, fishing, and trapping interests. The Joint Board should solicit public review and comment before considering such regulations.

5) Repealing 5 AAC 96.06(e)(3) which provides for electing advisory committee members by the public in attendance at advisory committee meetings and adopt new regulations to provide for membership by appointment from the Commissioner of Fish and Game. The idea of using a majority vote by eligible voters in attendance has proven to be a successful method of electing members. There are over 900 volunteer members on local fish and game advisory committees throughout the state, and in any one year, one third of the terms are up for election. Developing a basis for informed appointments by the commissioner for some 300 seats a year would be administratively burdensome and would remove the control of committee membership from the local level.

### 6) Adopting new election procedures if direct elections are maintained.

Department staff could work with individual advisory committees in advance of election meetings to assist advisory committees with articulating their own procedures for holding elections consistent with the codified regulations. Procedures appropriate for committees in large population centers may be inappropriate in small rural communities.

### Recommendation

The department recommends that each board independently review this petition during the currently scheduled January 2010 board meetings and assess the need for a joint meeting of the Board of Fisheries and Board of Game.

If both boards conclude a joint meeting is necessary to address the issues identified in this petition, the department recommends that each board select three members to meet with department staff after March 2010 to 1) compile a list of potential topics for consideration, 2) develop a schedule for issuing a Call for Proposals, and 3) set a time for a Joint Board meeting within budget limitations.

If one or both boards conclude a joint meeting is not warranted to address the issues identified in this petition, the department should be instructed to send a letter to the petitioners that the petition is denied.

Alaska Department of Fish and Game Language for proposal 87

5 AAC 05.360(d)(1) is amended to read:

(1) Coastal District, Koyukuk River, <u>Innoko River</u>, and Subdistrict 5-D; seven days per week;

# STATE OF ALASKA

### DEPARTMENT OF FISH AND GAME ALASKA BOARD OF FISHEIRES

SEAN PARNELL, GOVERNOR

RC 127

ADF&G
P.O. BOX 115526
JUNEAU, AK 99811-5526
PHONE: (907) 465-4110

FAX: (907) 465-6094

### (DRAFT 1/31/10)

Representative Mike Chenault Speaker of the House, Alaska State Legislature State Capitol, Room 208 Juneau, Alaska 99801-1182

Senator Gary Stevens Senate President, Alaska State Legislature State Capitol, Room 111 Juneau, Alaska 99801-1182

January 31, 2010

Dear Representative Mike Chenault and Senator Gary Stevens,

The Alaska Board of Fisheries supports the language providing for resource protection found in House Bill 277 which would establish a fishing and hunting reserve in the Holitna River Basin. This action is consistent with the Board of Fisheries responsibilities in the conservation and development of fishery resources in the state.

Thank you for your interest in the conservation and development of Alaska's fisheries resources.

Sincerely,

Vince Webster Chairman, Alaska Board of Fisheries

cc: Governor Sean Parnell
Denby Lloyd, Commissioner, Department of Fish and Game

### Miscellaneous Business

Alaska Board of Fisheries January 26-31, 2010 Arctic-Yukon-Kuskokwim Finfish, Fairbanks

Letter re Holitna Reserve legislation (RC 79, RC127)

Draft board-generated proposals on Chitina dipnet fishery (RC 92, RC 93)

Petition from Alaska Wildlife Alliance re advisory committees (Petition Tab, RC 125)

Adjourn

RC 129

### Governor Parnell.

The Board of Fisheries has just completed a very difficult meeting on Arctic-Yukon-Kuskokwim (AYK) finfish, and the resource situation in many parts of western Alaska is grave. Several significant chum and Chinook salmon stocks have been depressed for over a decade and classified as "stocks of concern," yet we still don't fully understand the reasons for these declines in productivity. Ultimately, the Board is charged with conserving these resources and we had to make some tough decisions in an attempt to preserve and rebuild these runs. Many of these decisions will not be popular, in fact, they result in difficult burdens for the AYK residents. We expect they understand that the sacrifices now are necessary to aid in the restoration of salmon populations for generations to come.

The Board would like to thank you for the recent inclusion of 1.2 million dollars for research on western Alaska salmon populations. Some of this funding is quite important to complete the Western Alaska Salmon Stock Identification Program, as well as several other items, particularly an examination of ways to improve the lower Yukon River sonar assessment project at Pilot Station. These projects can and will provide valuable information for the Department of Fish and Game and the Board of Fisheries.

However, more is needed. While we understand that financial resources are always limited it is imperative that we put the maximum amount of money into play in order to get the maximum amount of information to assist in future decisions. The AYK region represents over half of the State's landmass and is an area of the State with an extremely high dependence upon fish and game resources for subsistence use – the highest use priority, as our Constitution mandates.

While the Board is charged with conserving, managing and allocating Alaska's fishery resources, we don't have the authority to allocate financial resources where it is needed. We strongly recommend that you dedicate significant additional funding to the AYK region, both directly into the Department's ongoing budgets, and through collaborative multi-agency and stakeholder efforts such as the AYK Sustainable Salmon Initiative (AYK SSI).

