## **Kuskokwim River Salmon Management Working Group**

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO) ADF&G Bethel toll free: 1 (855) 933-2433

## **Meeting Agenda**

Date: June 15, 2012 Time: 10:00 am Place: Bethel

Time Called to Order Chair Time Adjourned

ROLL CALL TO ESTABLISH QUORUM: QUORUM MET? Yes / No Upriver Elder: Processor:

Downriver Elder: Member at Large: Commercial Fisher: Sport Fisher:

Lower River Subsistence: Western Interior RAC:

Middle River Subsistence: Y-K Delta RAC:

Upper River Subsistence: ADF&G:

**Headwaters Subsistence:** 

INTRODUCTIONS: INVOCATION:

APPROVAL OF AGENDA: PEOPLE TO BE HEARD:

## **CONTINUING BUSINESS:**

- 1. Subsistence Reports:
  - a. Lower River:
  - b. ONC Inseason Subsistence:
  - c. Middle River:
  - d. KNA Inseason Subsistence:
  - e. Upper River:
  - f. Headwaters:
- 2. Overview of Kuskokwim River salmon run assessment projects:
  - a. Bethel Test Fish
  - b. Weirs/Mark-Recapture/Aerial Surveys/Other:
- 3. Commercial Catch Report:
- 4. Processor Report:
- 5. Sport Fish Report:
- 6. Weather Forecast:
- 7. Recommendation:
- 8. Motion for Discussion and Action:

#### **OLD BUSINESS:**

- 1. Action items from previous meetings:
  - a) Beverly Hoffman's request to the Kuskokwim River Watershed Council regarding creating a Calvin Simeon award
  - b) Beverly Hoffman's letter of recruitment for the Upriver Elder seat
  - c) Update on public outreach efforts
  - d) Beverly Hoffman's letter to the NPFMC
  - e) Lamont Albertson's letter in support of HB332?

- f) Review of KRSMWG Bylaws g) Update KRSMWG Seats (roll-call list, possible alternates) h) Lamont Albertson's letter in support of USFWS participation in the KRSMWG

NE	W	Bl	JSI	N	ESS:
----	---	----	-----	---	------

1. Mark Leary's proposal to close remaining tributaries in the Napaimute area to sport fishing for Chinook salmon (Holokuk, Owhat, Oskawalik, etc.).

COMMENTS FROM WORKING GROUP MEMBERS:													
NEXT MEETING DATE:	Time	Place:											

## **Kuskokwim River Salmon Management Working Group**

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO) ADF&G Bethel toll free: 1 (855) 933-2433

## **Information Packet**

June 15, 2012

## **LOWER KUSKOKWIM RIVER INSEASON REPORTS:**

## **Kuskokwim River Inseason Subsistence Catch Monitoring Report Orutsararmiut Native Council**

June 10, 2012

Fishing reports from June 7 – June 10, 2012.

Families Surveyed	Families Fishing	Using Driftnets	Using Setnets	Both nets	Gillnets More than 6" mesh	Gillnets 6" mesh or less	Both sizes	Rod & Reel
36	14	7	5	2	4	8	2	0

Compared with this time in a normal year, how are catch rates for salmon this week?

	Chinook			Chum		Sockeye						
Very Good	Normal	Poor	Very Good	Normal	Poor	Very Good	Normal	Poor				
1	0	8	1	0	0	0	1	0				

Does the salmon run appear to be running early, late, or normal?

	Chinook			Chum		Sockeye				
Early	Normal	Late	Early	Normal	Late	Early	Normal	Late		
1	0	8	1	0	0	0	1	0		

#### Comments: For the week ending June 10<sup>th</sup>, 2012.

<u>Subsistence Chinook ASL Sampling Program:</u> ONC inseason subsistence survey crew members prepared survey kits and distributed nine ASL Chinook sampling kits to families who had previously sampled for the program. This year ONC technicians focused on recruiting experienced samplers who have provided quality scales and data, whereas last year we handed out sampling kits to any willing fish camps sites. Some families still had kits from last year and plan to use them again this year. A couple of fishers said they were not participating in the program because sampling is too challenging and time consuming between subsistence closures.

<u>Ichthyophonus Fungal Disease Sampling Program</u>: ONC inseason subsistence survey crew members sampled a total of 9 females from subsistence caught Chinooks.

<u>Net Observation</u>: From Bethel to the mouth of Gweek ONC technicians observed 6 set nets, 2 drift nets, and 1 whitefish set net. From Bethel to the Napaskiak/ Oscar "Hot Spot of the Week" ONC technicians observed 32 set nets and 36 drift nets.

#### **ONC Inseason Survey:**

36 families were interviewed this week for the inseason subsistence monitoring program. The Kuskokwim River survey zone reaches from the mouth of Gweek River and concludes at Napaskiak slough.

Of the 36 families, 14 (39%) families had started subsistence fishing. Prior to the recent increase of salmon catches many families were finishing drying and smoking smelts (*Osmeridae*), sheefish (*Inconnu*), and Cisco (*whitefish* or *Akakeek*). Some of the families that were starting to fish this week reported to pulling out nets because they are catching too many sheefish.

22 (61%) of families have not started fishing. Many of the families are mending and preparing nets, cleaning camp, fixing drying racks and smoke houses, or tending to other fish camp maintenance. Many fishers said that they were waiting for the salmon runs to increase in abundance in order to fish efficiently and save on boat gas costs.

To make up for the expected low Chinook run this year, families are voluntarily changing to a smaller mesh size in order to target more sockeye and chum. Also, we had a number of families hoping that the restrictions on mesh size would not fluctuate too drastically this year because it is becoming too expensive to purchase different mesh size nets when gas prices are on the rise.

#### **Salmon Species Survey:**

#### **Chinook:**

**Catch rate:** Of the 14 families fishing this week, 1 (7%) family reported the Chinook catch as very good, 0 families reported the catch as normal, 8 (57%) families reported it as poor. 5 (36%) families were not able to comment. All families agreed that a possible explanation for the poor run the high water and cold water temperatures. Many families observed mixed sizes of Chinook and larger males than last year.

**Run timing:** 1 (7%) family reported the run as early, 0 families reported the run timing as normal, and 8 (57%) families reported the run to be late this year, due to high water and cold temperatures. Some families were concerned that increased barge traffic that could be one cause of a late Chinook return.

#### Chum:

**Catch Rate/Run timing:** Of the 14 families fishing this week, only 1 (7%) family reported catching a chum and reported a very good catch rate and early run timing.

#### Sockeye:

**Catch Rate/ Run timing:** Of the 14 families fishing this week, only 1 (7%) family reported catching a sockeye and reported catch rate and run timing as normal.

\*Please see the 2011 ONC historic catch rates on page 5 of this document.

## MIDDLE AND UPPER KUSKOKWIM RIVER INSEASON REPORTS:

## **Kuskokwim Native Association (KNA)**

• KNA will give an oral report at the June 15 meeting.

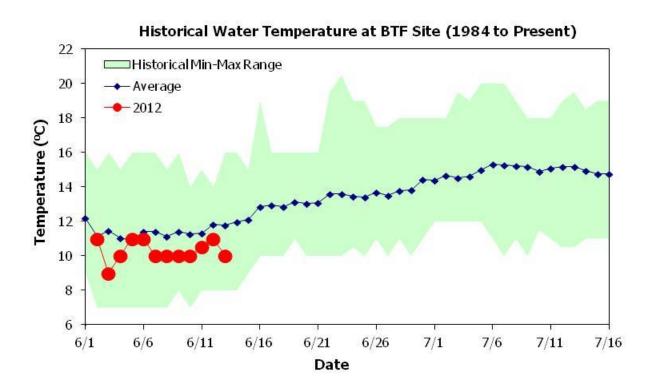
## **ONC Historical Catch Rate Table**

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

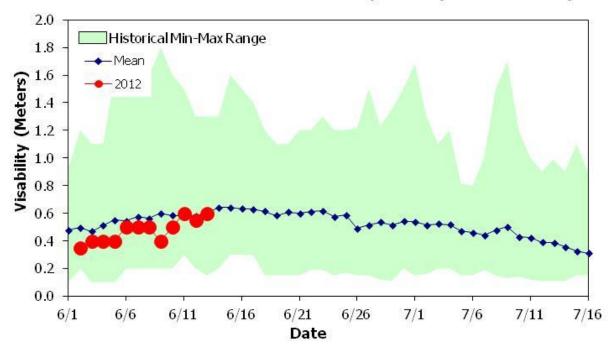
		Num	ber of Fan	nilies	Ch	inook salm	on	Cl	num salmo	n	Soc	ckeye salm	non
Year	Week Ending	Inter- viewed	Fishing	Not Fishing	Very Good	Normal	Poor	Very Good	Normal	Poor	Very Good	Normal	Poor
2011	Jun 05 Jun 12 Jun 19 Jun 26 Jul 03 Jul 10	36 69 57 49 45 71	11 41 56 44 41 15	25 28 1 5 4 56	36% 7% 25% 14% 66% 13%	36% 34% 38% 22% 15% 0	0 49% 37% 64% 19% 67%	ND 10% 14% 21% 78% 80%	ND 46% 52% 36% 10% 7%	ND 10% 20% 34% 10% 0%	9% 10% 14% 23% 76% 33%	9% 46% 57% 59% 17% 20%	0 7% 18% 9% 5% 33%
2010	Jun 06 Jun 13 Jun 20 Jun 27 Jul 04 Jul 11	19 39 26 37 38 20	6 28 23 37 36 11	13 11 3 0 2	0 4% 9% 3% 8% 0	100% 50% 65% 73% 69% 91%	0 46% 26% 24% 22% 0%	ND 0 0 3% 14% 27%	ND 72% 100% 92% 78% 64%	ND 28% 0 5% 8% 0	ND ND 0 5% 3% 18%	ND ND 96% 81% 69% 55%	ND ND 4% 14% 28% 18%
2009	Jun 07 Jun 14 Jun 21 Jun 28 Jul 05 Jul 12	20 43 44 36 36 36	6 38 44 31 5	14 5 0 5 31 34	0 29% 41% 39% 0	50% 50% 36% 55% 100%	33% 21% 23% 6% 0	ND 0 0 3% 0	ND 100% 100% 77% 100% 100%	ND 0 0 9% 0	ND 0 0 6% 0	ND 100% 86% 71% 100% 100%	ND 0 14% 23% 0
2008	Jun 08 Jun 16 Jun 22 Jun 29 Jul 08 Jul 13	27 34 32 33 35 32	5 17 27 27 15	22 17 5 6 20 29	20% 0 56% 52% 20% 0	60% 76% 44% 48% 80% 100%	0 24% 0 0 0	ND 0 0 15% 0 33%	ND 100% 74% 85% 100% 67%	ND 0 26% 0 0	ND 0 81% 56% 47% 0	ND 100% 19% 44% 53% 100%	ND 0 0 0 0
2007	Jun 03 Jun 12 Jun 17 Jun 24 Jul 02 Jul 08 Jul 14	ND 39 40 44 36 33 33	ND 28 33 40 20 10 6	ND 11 7 4 12 23 27	ND 0 0 0 45% 60%	ND 29% 30% 35% 45% 40% 0	ND 71% 70% 65% 10% 0	ND ND ND ND 80% 80%	ND ND ND ND 20% 20%	ND ND ND ND 0 0	ND ND ND ND 0 30%	ND ND ND ND 40 70%	ND ND ND ND 60% 0 83%
2006	Jun 03 Jun 10 Jun 17 Jun 25 Jul 02 Jul 09 Jul 17	22 32 36 48 46 38 26	0 19 30 43 14 8	22 13 6 5 32 30 21	0 32% 60% 79% 21% 0	0 68% 40% 21% 79% 100%	0 0 0 0 0 0	ND 0 60% 91% 71% 25% 100	ND 0 40% 9% 29% 75% 0	ND 0 0 0 0 0	ND ND 53% 19% 43% 37% 0	ND ND 47% 56% 57% 63% 100%	ND ND 0 26% 0 0

## **OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

The historical Kuskokwim River water level graph at Crooked Creek is not available because the gauge is not in operation yet.

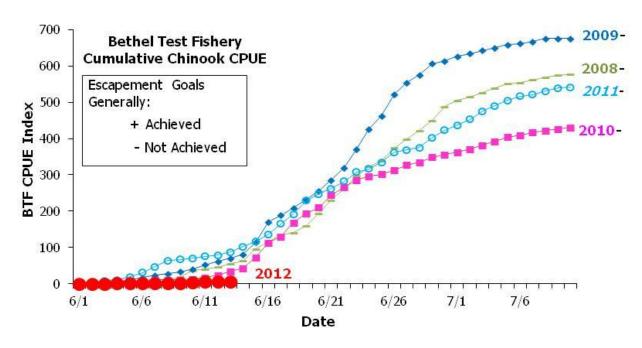


## Historical Kuskokwim River Water Clarity at BTF (1984 to Present)

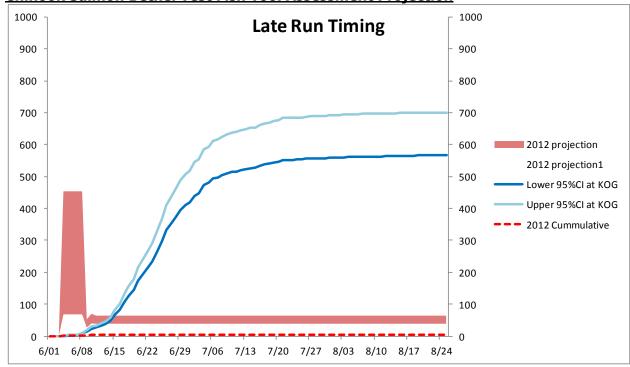


## **CHINOOK**

## **Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery**



## **Chinook Salmon Bethel Test Fish Tool Assessment Projection**



## **CHINOOK (Continued)**

# Bethel Test Fishery Chinook Salmon Cumulative CPUE Index (UNCORRECTED)

CPUE index numbers for years prior to 2008 are less comparable due to change in net catchai

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
6/01	0	1	3	0	0	0	0	0	0	3	0
6/02	1	13	5	0	0	0	3	0	3	5	0
6/03	1	29	7	1	0	0	3	1	4	8	0
5/04	1	<i>35</i>	13	1	0	1	3	4	7	11	1
6/05	6	44	19	6	3	3	3	10	7	20	1
6/06	13	48	23	7	6	3	4	17	8	31	1
5/07	<i>15</i>	<i>59</i>	27	11	6	4	4	24	10	47	1
6/08	18	70	40	23	8	7	10	28	10	63	1
5/09	<i>36</i>	106	70	<i>30</i>	9	11	20	33	11	67	3
5/10	<i>51</i>	131	<i>75</i>	49	9	19	36	40	13	70	4
6/11	<i>59</i>	147	118	91	14	23	40	52	17	75	6
6/12	<i>82</i>	172	147	118	18	<i>30</i>	46	62	23	78	6
5/13	101	199	174	137	<i>33</i>	<i>33</i>	56	71	34	88	6
5/14	127	221	217	173	48	42	63	81	42	102	
5/15	165	258	258	186	<i>77</i>	60	96	114	73	116	
6/16	181	285	311	236	96	62	115	171	112	136	
5/17	196	<i>332</i>	<i>347</i>	265	126	<i>82</i>	135	189	130	165	
5/18	217	362	<i>396</i>	299	170	97	142	209	168	192	
5/19	243	390	430	330	207	117	160	232	193	229	
5/20	248	413	484	389	208	138	195	255	210	247	
5/21	262	439	<i>556</i>	430	252	146	230	286	244	262	
6/22	263	450	600	464	263	<i>156</i>	262	320	267	283	
6/23	273	463	<i>643</i>	488	298	165	298	371	285	308	
5/24	284	478	691	520	329	182	323	426	297	317	
6/25	295	493	738	555	356	206	339	463	302	335	
6/26	308	508	785	589	388	221	374	522	314	363	
5/27	316	515	801	600	417	237	399	555	327	369	
6/28	325	527	848	611	444	259	422	575	335	376	
5/29	328	<i>537</i>	893	632	469	289	451	606	349	402	
6/30	339	<i>556</i>	928	<i>653</i>	493	325	488	615	355	423	
7/01	344	<i>558</i>	<i>951</i>	672	511	<i>354</i>	505	626	362	438	
7/02	356	<i>563</i>	967	<i>684</i>	<i>530</i>	<i>377</i>	515	635	370	453	
7/03	359	569	979	696	<i>553</i>	406	527	643	381	476	
7/04	<i>368</i>	<i>578</i>	<i>985</i>	715	<i>576</i>	425	539	650	393	490	
7/05	<i>374</i>	<i>588</i>	993	744	<i>579</i>	433	551	659	404	505	
7/06	378	595	1,002	775	598	443	554	662	409	517	
7/00 7/07	378 381	599	1,002 1,006	775 795	604	451	562	668	417	521	
7/07	383	601	1,013	809	<i>607</i>	457	569	676	422	531	
7/08 7/09	384	605	1,013 1,023	803 821	611	459	575	676	426	539	
7/09 7/10	390	607	1,025 1,026	831	616	476	578	676	431	542	

## **SOCKEYE**

Bethel Test Fishery
Sockeye Salmon Cumulative CPUE Index

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
6/01	0	0	0	0	0	0	0	0	0	0	0
6/02	0	0	0	0	0	0	0	0	0	0	0
6/03	0	0	0	3	0	0	0	0	0	0	0
6/04	0	0	0	3	0	0	0	0	0	0	0
6/05	0	0	0	6	0	0	0	0	0	0	0
6/06	0	0	0	6	0	0	0	0	0	3	0
6/07	0	0	0	6	0	0	0	0	0	4	0
6/08	0	0	0	6	0	0	0	1	0	4	0
6/09	3	5	8	11	0	0	0	4	0	4	0
6/10	8	24	11	22	0	0	0	4	0	7	0
6/11	18	38	22	46	0	0	0	7	0	10	0
6/12	35	46	27	63	3	3	0	10	3	13	0
6/13	61	54	38	96	3	17	3	13	6	15	0
6/14	67	67	49	149	3	23	6	13	6	24	
6/15	92	97	77	154	11	31	34	16	21	33	
6/16	138	176	130	181	24	36	45	31	46	62	
6/17	158	279	145	236	42	50	48	34	65	102	
6/18	174	335	189	336	81	60	62	61	84	126	
6/19	196	446	212	444	136	74	87	86	142	191	
6/20	240	518	270	634	160	98	102	113	149	231	
6/21	272	585	364	866	219	147	128	146	251	274	
6/22	290	646	509	1,056	239	186	237	171	323	326	
6/23	325	670	628	1,239	350	197	320	251	347	365	
6/24	346	718	833	1,370	422	290	381	340	366	400	
6/25	353	771	966	1,489	454	338	455	429	375	543	
6/26	368	793	1,027	1,640	556	393	518	528	394	586	
6/27	385	836	1,055	1,785	748	436	572	588	411	664	
6/28	407	994	1,133	1,901	869	560	619	629	428	709	
6/29	424	1,207	1,222	2,052	920	710	660	729	446	813	
6/30	446	1,296	1,283	2,204	971	833	813	766	491	952	

## **CHUM**

Bethel Test Fishery
Chum Salmon Cumulative CPUE Index

r	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
5/01	0	0	0	0	0	0	0	0	0	0	0
5/02	0	0	3	0	0	0	0	0	0	0	0
5/03	0	0	3	0	0	0	0	0	0	0	0
5/04	0	0	8	0	0	0	0	0	4	3	0
5/05	0	0	11	0	3	0	0	3	6	3	0
5/06	8	0	11	0	9	0	0	4	6	3	3
5/07	8	0	11	0	9	3	0	4	6	3	3
5/08	11	0	14	0	12	3	6	6	6	6	3
5/09	41	0	22	0	12	3	9	9	6	11	3
5/10	50	6	22	0	15	8	9	9	9	17	8
5/11	103	8	25	13	35	11	12	9	9	22	8
5/12	146	11	34	25	41	11	18	12	15	22	8
5/13	180	17	71	38	133	23	18	14	26	31	16
5/14	202	30	110	49	210	34	20	20	31	39	
5/15	285	49	144	87	266	57	41	42	50	60	
5/16	299	77	179	95	350	74	66	69	86	63	
5/17	338	103	229	131	499	94	80	75	133	85	
5/18	552	108	310	188	747	110	94	91	386	135	
5/19	665	148	371	252	927	138	106	99	542	199	
5/20	801	198	450	537	1012	258	161	105	588	241	
5/21	836	226	547	844	1482	343	190	135	764	276	
5/22	903	235	659	1288	1595	407	264	149	954	371	
5/23	1047	270	959	1587	1916	506	337	301	1049	414	
5/24	1181	291	1260	1817	2188	632	437	397	1163	433	
5/25	1329	312	1583	1918	2412	840	598	532	1224	597	
5/26	1466	349	1926	2077	2646	1075	753	783	1340	769	
5/27	1622	375	2014	2183	2941	1308	921	904	1524	963	
5/28	1897	496	2271	2273	3402	1783	1099	1028	1613	1165	
5/29	2048	791	2514	2631	4031	2589	1176	1407	1738	1607	
5/30	2136	1059	2653	2989	4660	2917	1550	1800	1931	2223	

## **ESCAPEMENT MONITORING**

## Status of Salmon Assessment Projects as of June 15, 2012

 At this time there is no weir data for any ADF&G projects. All projects are currently being installed.

## <u>MANAGEMENT</u>

## Start Dates for Rolling Closures Initiated June 10, 2012

Rolling Closure Section	START at 12:01 am:
Section 1:	Sunday, June 10
Lower Section of Subdistrict 1-B to the midpoint of Subdistrict 1-B	
Section 2:	Wednesday, June 13
Upper Section of Subdistrict 1-B to Tuluksak	
Section 3:	Sunday, June 17
Tuluksak to Chuathbaluk	
Section 4:	Friday, June 22
Chuathbaluk to Holitna River mouth	
Section 5:	Wednesday, June 27
Holitna River mouth to Headwaters	

## **Rolling Closure Section Descriptions**

#### **Lower Section of Subdistrict 1-B: Section 1**

This area is defined as, that portion of the Kuskokwim River and its tributaries upstream from a line from Apokak Slough to the southernmost tip of Eek Island to Popokamiut to a line between ADF&G regulatory markers located between the Kialik and Johnson Rivers. This area is also known as the Lower Section of commercial fishing Subdistrict 1-B.

Excluded waters are non-salmon spawning tributaries: those portions of Kinak, Kialik, and Tagayarak rivers more than 100 yards upstream from the mouth of these rivers are open with any mesh size gillnet and are not affected by these closures.

## **Upper Section of Subdistrict 1-B to Tuluksak: Section 2**

This area is defined as that portion of the Kuskokwim River and its tributaries upstream from a line between ADF&G regulatory markers located between the Kialik and Johnson Rivers to a line between ADF&G regulatory markers located approximately half a mile upstream of the Tuluksak River mouth. This section includes the slough (locally known as Utak Slough) on the northwest side of the Kuskokwim River adjacent to the Tuluksak River mouth.

Excluded waters are non-salmon spawning tributaries: the Whitefish Lake drainage near Aniak and those portions of Discovery, Birch, and Swift creeks more than 100 yards upstream from

the mouth of these rivers are open with any mesh size gillnet and are not affected by these closures.

#### **Tuluksak to Chuathbaluk: Section 3**

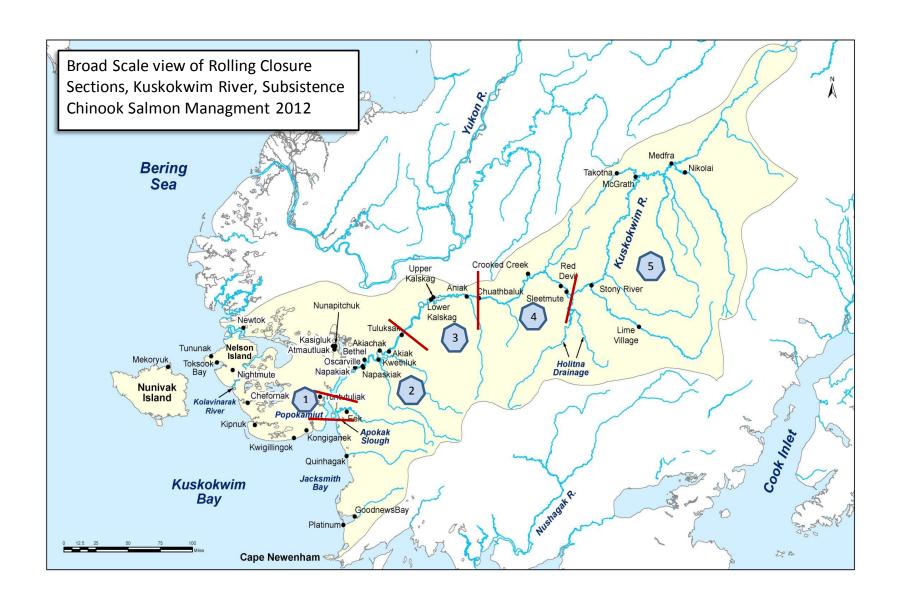
This area is defined as that portion of the Kuskokwim River and its tributaries upstream from a line between ADF&G regulatory markers located approximately half a mile upstream of the Tuluksak River mouth to a line between ADF&G regulatory markers located at the downstream edge of Chuathbaluk. This section does <u>NOT</u> include the slough (locally known as Utak Slough) on the northwest side of the Kuskokwim River adjacent to the Tuluksak River mouth.

#### Chuathbaluk to the Holitna River mouth: Section 4

This area is defined as that portion of the Kuskokwim River and its tributaries upstream from a line between ADF&G regulatory markers located at the downstream edge of Chuathbaluk to a line between ADF&G regulatory markers located downstream of the Holitna River mouth.

#### The Holitna River mouth to the Headwaters of Kuskokwim River: Section 5

This area is defined as that portion of the Kuskokwim River and its tributaries upstream from a line between ADF&G regulatory markers located downstream of the Holitna River mouth upstream to the headwaters of the Kuskokwim River.



## **SPORT FISH**

Γable 11.—Sport fishing harvest and catch of king salmon in the Aniak, Kisaralik, Kwethluk and other Kuskokwim rivers, 1990–2010.

	Aniak	River	Kisaral	ik River	Kwethlu	k River	Holitna	River	-	Kuskokw To	
Year	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	-	Harvest	Catch
1990	285	1,181					0	27		340	653
1991	214	222					0	0		351	2,621
1992	172	827			31	47	23	109		296	4,752
1993	300	1,426					68	375		444	9,684
1994	437	573	148	196			40	110		977	3,370
1995	279	2,729					19	91		506	3,592
1996	592	3,375					256	662		1,506	11,540
1997	801	12,943	49	678	49	108	166	786		1,480	17,974
1998	1,058	5,896	6	74	75	467	54	335		1,388	7,905
1999	134	2,776	0	12	0	0	25	240		351	4,691
2000	10	435	10	343	20	171	22	22		105	1,173
2001	12	713	0	62	43	77	73	823		290	4,657
2002	135	1,759	46	531	30	195	53	210		319	3,225
2003	12	874	75	335	103	861	48	272		391	5,020
2004	335	1,103	58	1,774	150	778	136	619		857	5,427
2005	189	594	40	907	68	385	180	470		572	2,652
2006	29	1,201	86	359	183	493	16	173		444	3,480
2007	218	5,380	446	1,096	93	733	86	171		1,683	11,224
2008	26	3,612	148	1,578	149	844	122	992		739	7,382
2009	10	796	51	287	42	499	0	676		917	3,586
2010	0	1,902	0	717	107	591	39	130		354	3,564
2000-											- ,
2009	98	1,647	96	504	88	504	74	443		632	4,783
Average											
2005-											
2009	94	2,317	154	591	107	591	81	496		871	5,665
Average											

## **SPORT FISH (Continued)**

Appendix G1.-Freshwater logbook angler days and species kept by area and site, AYK Alaska, 2010.

		Angler		Salmo	1		Tro	ut		Dolly	I	Northern	1
Area	a Site	Days	King	Coho	Sockeye	Cutthroat	Rainbow	Steelhead	Lake	Varden	Grayling	Pike	Sheefish
I	Copper River	108	82	1	21	0	0	0	0	0	0	0	0
I	Gulkana River (Highway to Copper River)	151	60	0	7	0	0	0	0	0	0	0	0
I	Gulkana River (West Fork to Highway)	257	125	0	7	0	0	0	0	0	0	0	0
I	Klutina River	1,286	563	0	356	0	1	0	0	184	6	0	0
I	Other Streams	68	18	0	0	0	0	0	0	0	0	0	0
U	Other Lakes	70	0	0	0	0	10	0	0	1	41	124	0
U	Other Streams	1,031	6	95	0	0	0	0	0	0	2	0	0
V	Aniak River	630	10	47	3	0	0	0	0	24	4	12	5
V	Goodnews River	862	76	552	63	0	6	0	0	39	0	0	0
V	Holitna River	400	76	33	0	0	0	0	0	50	2	14	19
V	Kanektok River (Quinhagak, Chosen)	1,830	163	598	210	0	1	0	0	42	11	0	0
V	Kuskokwim River drainages below Aniak R <sup>a</sup>	645	6	14	0	0	0	0	0	10	21	0	0
V	Other Lakes and Streams	134	0	1	1	0	0	0	0	1	0	0	0
V	Other Streams - Kuskokwim drainages above Aniak R.	57	0	14	0	0	0	0	1	0	0	2	0
W	Streams	549	36	559	0	0	0	0	0	151	6	0	0
Y	Lakes and Streams	1,119	74	238	0	0	0	0	0	20	133	24	7
	Other Lakes and Streams in AYK	219	0	0	0	0	0	0	0	202	0	0	34
	Total AYK	9,416	1,295	2,152	668	0	18	0	1	724	226	176	65

*Note*: Responses with less than 4 businesses are not reported separately, to protect confidentiality of respondents. Data are current as of 05/26/2011.

<sup>&</sup>lt;sup>a</sup> Kuskokwim River drainages below Aniak River; includes drainages of the Aniak River.