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: 7/2/2014	Time: 1:30pm	Place: Bethel
Time Called to Order:	Chair:	Time Adjourned:
ROLL CALL TO EST Upriver Elder: Downriver Elder: Commercial Fisher: Lower River Subsistence: Middle River Subsistence: Upper River Subsistence: Headwaters Subsistence:	ABLISH QUORUM:	QUORUM MET? Yes / No Processor: Member at Large: Sport Fisher: Western Interior RAC: Y-K Delta RAC: ADF&G:
INTRODUCTIONS: INVOCATION: APPROVAL OF AGENI APPROVAL OF MINUT PEOPLE TO BE HEAR! CONTINUING BUSINE 1. Subsistence Reports: a. Lowest River b. ONC Inseason Sub c. Lower River	TES: Optional. ADF&G d D: SS:	nended at this time. loes not prepare official meeting minutes.
 d. Middle River Chum salmon e. KNA Inseason Sub f. Upper River g. Headwaters 2. Overview of Kuskok a. Bethel Test Fish: 	wim River salmon run asses ture/Aerial Surveys/Other: eport:	ssment projects:
2. Explanation of how E	on Naneng (AVCP) regardin BTF CPUE is being used as	ng the Inter-Tribal Fish Commission a Chinook salmon assessment tool in 2014 on 1 July 2014 in Napaskiak
COMMENTS FROM W NEXT MEETING DATE		IBERS: ne:Place:

Kuskokwim River Salmon Management Working Group ADF&G Bethel toll free: 1 (855) 933-2433

Informational Packet

Information Packets ARE:

- Intended to help inform Working Group discussions.
- To be viewed and used in context with Working Group meetings only.

Packets ARE NOT:

- To be viewed as standalone documents.
- A final say on fisheries management decisions.

Please use this information responsibly:

Packet information is an incomplete snapshot of an ongoing discussion and changing conditions. Packet information should not be reproduced for any purpose other than to describe Working Group meeting discussions.

Misuse of Packet information can contribute to misunderstandings that can cause harm to salmon users and potentially damage salmon resources.

Ask Questions: ADF&G staff will be happy to answer biology and management questions. Please call 1-855-933-2433 to reach ADF&G Kuskokwim Area staff.

Attend Meetings: Each Working Group meeting is announced at least 48 hours prior to time and date of meeting. In addition, each meeting is recorded. Recordings can be found here: http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.kswg

Viewing the information packet while listening to meetings/recordings will provide a better understanding of the information presented in this packet.

Thank you.
Jennifer Peeks
Chris Shelden
Working Group coordinators

LOWER KUSKOKWIM RIVER INSEASON CATCH MONITORING REPORT: Orutsararmiut Native Council (ONC)

June 29, 2014

Fishing reports from June 22-28, 2014

_	j - p									
Ī						Larger				
	Families	Families			Both	than 6"	6" mesh	Both	Rod	
	Surveyed	Fishing	Driftnets	Setnets	Nets	mesh	and smaller	Sizes	&Reel	Dipnet
Ī	42	37	12	12	9	0	33	0	0	0
		_	32%	32%	24%	0%	89%	0%	0%	0%

Percentages are based on the number of families fishing each week.

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
0	3	18	23	6	3	20	6	6
0%	8%	49%	62%	16%	8%	54%	16%	16%

Percentages are based on the number of families fishing each week.

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

CHINOOK				CHUM		SOCKEYE		
Early	Normal	Late	Early	Normal	Late	Early	Normal	Late
4	11	5	6	20	6	6	20	6
11%	32%	14%	16%	54%	16%	16%	54%	16%

Percentages are based on the number of families fishing each week.

Harvest Goal Summary:

This week 19 families set harvest goals. One family reported a trout and whitefish harvest goal of 20 each, as well as one full drying rack of mixed salmon species. Three families reported a harvest goal of 40-300 mixed species of salmon. One family was still unsure about setting harvest goals because this was the first year they will be harvesting salmon other than Chinook.

Thirteen families reported to being done fishing this week and all reported not to having met their Chinook salmon subsistence needs. Eleven families reported to having met their sockeye and chum salmon seasonal needs and two families reported not having met their needs.

Five families were not willing to comment on the catch rate and run timing. Two families had not started fishing this year and one family had been given salmon. Another family this week reported to stop fishing abruptly, because they were moving.

Chinook:

Eleven families did not want to comment on the catch rate and twelve families did not want to comment on run timing, these are not included into the table.

Six families said they would not be targeting Chinook salmon this year. Twelve families reported traditional harvest goals for Chinook salmon, but were not directly targeting that species.

Many families that are fishing stated that catch rates for Chinook salmon have slowed down and a majority of the run has passed.

Chum:

Sixteen families reported chum salmon harvest goals ranging from 2-200+ salmon. Many families reported catching spawning or spawned chum salmons. One family reported catching one chum salmon that had already began deteriorating flesh. Families have been reporting chum salmon having a white-milky looking puss in the meat.

Sockeye:

Eleven families reported to having harvest goals ranging from 5-200 salmon. One family reported catching more sockeye salmon, this week, than normal. Two families reported some of the sockeye salmon they caught had parasites.

Coho:

Four families reported harvest goals ranging from 20-300 salmon.

Comments:

One family had reported seeing dead chum salmon floating down the river.

No families reported using a dip net.

Surveyor comments:

Five families did not comment this week. One family didn't comment on run timing or catch rate.

For the week ending on June 29th, ONC surveyed 42 families from the mouth of Gweek River to Napaskiak Slough.

Surveyors observed 64 set nets from the mouth of the Gweek River to Napaskiak this week.

Surveyors have distributed 5 ASL kits and one family turned in their subsistence samples.

Kuskokwim Native Association – INSEASON SUBSISTENCE REPORT

Week of: June 30, 2014

KALSKAG

Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6" Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
10	10	8	2	0	8	2	0	0	0
		80%	20%	0%	80%	20%	0%	0	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other
29	205	79	20WF
			6SH

Harvester comments: NONE

ANIAK

Families	Families	Drift-	Set-	>6"	>4"-6"	4" or	Rod &	Dipnet	Fish Wheel
Surveyed	Fishing	nets	nets	Mesh	Mesh	Less	Reel		
10	10	9	1	0	9	1	0	0	0
1		90%	10%	0%	90%	10%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other
73	311	58	11 W F
			2DO
			3SH

Harvester comments: NONE

CHUATHBALUK

Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6'' Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
3	3	3	0	0	3	0	0	0	0
		100%	0%	0%	100%	0%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

11 voruge cuteri puscu on rummes pur vey cu									
CHINOOK	CHUM	SOCKEYE	Other						
62	209	61	0						

Harvester comments: NONE

NAPAIMUTE

Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6" Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
1	1	1	0	0	0	1	0	0	0
	•	100%	0%	0%	0%	100%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other						
0	9	3	3WF						

Harvester comments: NONE

CROOKED CREEK

Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6" Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
5	5	5	0	0	2	3	0	0	0
		100%	0%	0%	40%	60%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other
25	100	40	92WF
			5SH

Harvester comments: NONE

RED DEVIL

	Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6" Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
ĺ	1	0	0	0	0	0	0	0	0	0
			0%	0%	0%	0%	0%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other
-	-	-	-

Harvester comments: NONE

SLEETMUTE

Famili Survey		Drift- nets	Set- nets	>6'' Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
3	2	0	2	0	1	1	0	0	0
		0%	100%	0%	50%	50%	0%	0%	0%

Percentages are based on the number of families fishing each week.

Average Catch based on families surveyed

			- J
CHINOOK	CHUM	SOCKEYE	Other
3	7	14	14wf 1P

Harvester comments: NONE

LIME VILLAGE

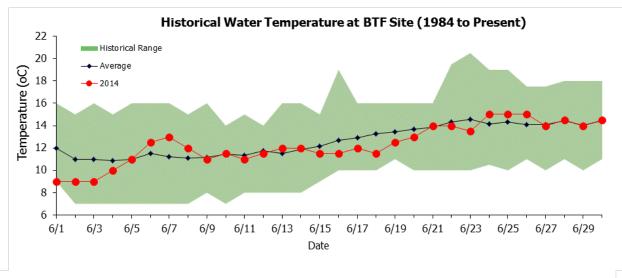
	Families Surveyed	Families Fishing	Drift- nets	Set- nets	>6" Mesh	>4"-6" Mesh	4" or Less	Rod & Reel	Dipnet	Fish Wheel
	3	0	0	0	0	0	0	0	0	0
,			0	0	0	0	0	0	0	0

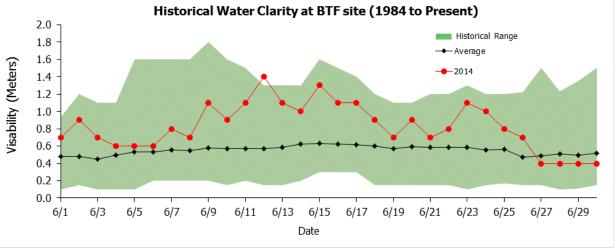
Percentages are based on the number of families fishing each week.

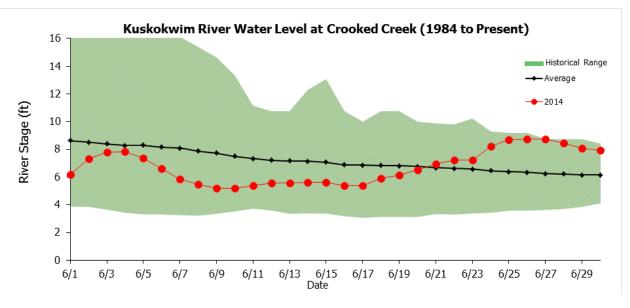
Average Catch based on families surveyed

CHINOOK	CHUM	SOCKEYE	Other
0	0	0	0

Harvester comments: All families said they normally don't fish until July when the Reds start to make their way up the Stony River.







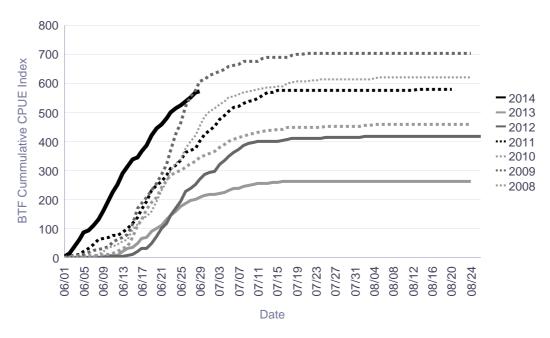
Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery

Bethel Test Fishery Chinook Salmon Cumulative CPUE Index

**2014 data are PRELIMINARY and not comparable to previous years due to subsistence fishing restrictions. **

				CPUE			
Date	2008	2009	2010	2011	2012	2013	2014
06/22	263	320	265	283	118	132	481
06/23	299	370	283	309	147	145	500
06/24	324	426	294	317	168	159	513
06/25	340	463	299	335	192	177	524
06/26	375	522	311	363	228	187	539
06/27	399	555	324	369	240	197	550
06/28	422	575	332	376	251	202	568
06/29	451	606	345	402	270	206	573
06/30	488	614	352	423	286	214	
07/01	505	626	359	437	293	217	
07/02	515	634	367	452	298	218	
07/03	527	642	378	475	321	222	
07/04	539	649	389	489	334	226	
07/05	551	658	401	503	347	231	
07/06	554	661	406	516	361	237	
07/07	562	667	414	520	374	239	
07/08	569	676	419	530	386	246	
07/09	574	676	423	538	395	248	
07/10	577	676	428	541	398	251	
07/11	578	676	430	548	401	254	

Bethel Test Fishery, Chinook Salmon Cumulative CPUE



Resulting escapement relative to New Kuskokwim River SEG (65,000 - 120,000)

2008 - Achieved (+) no restrictions

2009 - Achieved (+) no restrictions

2010 - Not Achieved (-) late tributary restrictions
2011 - Achieved (+) 15 days restrictions, minor reduction to subsistence harvest

2012 - Achieved (+) 35 days restrictions, significant reduction to subsistence harvest

2013 - Not Achieved (-) tributary restrictions and late main stem restrictions, significant reduction to subsistence harvest

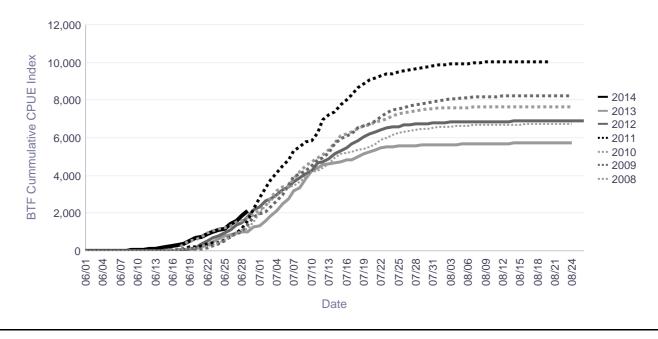
Chum Salmon Cumulative CPUE Index, Bethel Test Fishery

Bethel Test Fishery Chum Salmon Cumulative CPUE Index

**2014 data are PRELIMINARY and not comparable to previous years due to subsistence fishing restrictions. **

				CPUE			
Date	2008	2009	2010	2011	2012	2013	2014
06/22	264	148	955	372	553	313	886
06/23	337	300	1,050	415	705	511	995
06/24	437	396	1,164	434	798	669	1,120
06/25	598	531	1,225	598	989	805	1,195
06/26	754	782	1,340	770	1,110	881	1,434
06/27	922	903	1,524	964	1,386	979	1,608
06/28	1,101	1,028	1,613	1,166	1,495	1,007	1,851
06/29	1,178	1,407	1,739	1,607	1,801	1,020	2,155
06/30	1,551	1,800	1,932	2,223	2,188	1,297	
07/01	2,012	1,959	2,197	2,813	2,350	1,349	
07/02	2,379	2,104	2,379	3,354	2,653	1,584	
07/03	2,681	2,340	2,840	3,751	2,756	1,842	
07/04	2,954	2,664	3,174	4,128	2,998	2,146	
07/05	3,198	3,000	3,381	4,505	3,239	2,527	
07/06	3,392	3,530	3,480	4,854	3,423	2,757	
07/07	3,473	3,916	3,804	5,340	3,695	3,176	
07/08	3,661	4,083	4,206	5,542	3,879	3,355	
07/09	3,910	4,256	4,526	5,811	4,078	3,831	
07/10	4,220	4,502	4,718	5,842	4,275	4,263	
07/11	4,262	4,855	4,942	6,263	4,675	4,394	

Bethel Test Fishery, Chum Salmon Cumulative CPUE



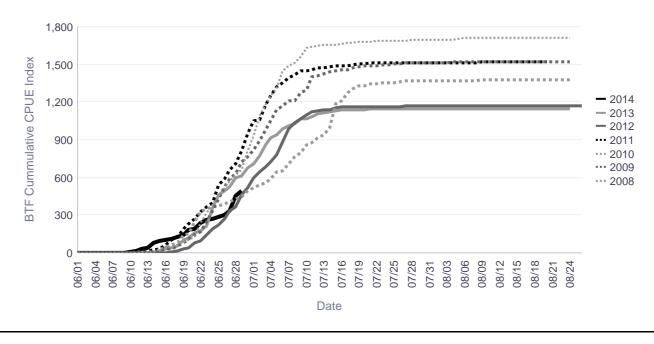
Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery

Bethel Test Fishery Sockeye Salmon Cumulative CPUE Index

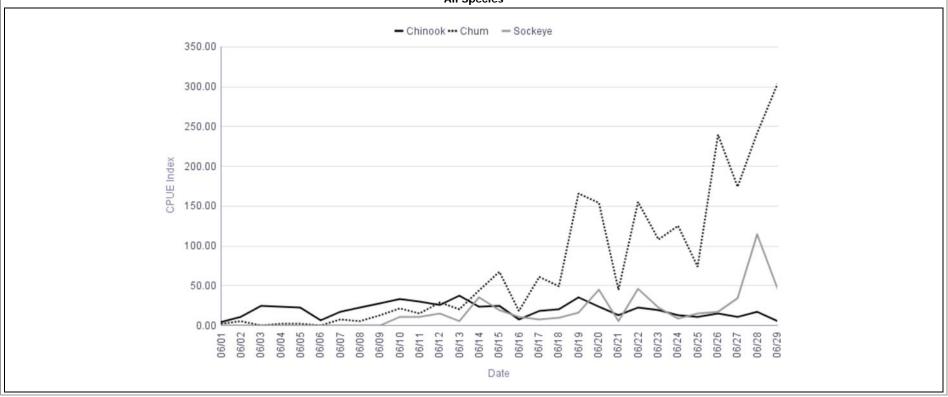
**2014 data are PRELIMINARY and not comparable to previous years due to subsistence fishing restrictions. **

				CPUE			
Date	2008	2009	2010	2011	2012	2013	2014
06/22	238	170	324	327	94	179	239
06/23	322	250	348	366	146	213	262
06/24	382	339	367	401	194	358	271
06/25	456	428	375	544	225	461	286
06/26	519	527	394	587	269	492	303
06/27	573	587	411	664	332	531	338
06/28	619	629	428	710	368	601	452
06/29	661	729	446	813	465	614	498
06/30	814	766	491	952	516	674	
07/01	934	818	515	1,049	596	712	
07/02	1,093	891	545	1,059	649	773	
07/03	1,179	978	561	1,181	689	862	
07/04	1,253	1,048	594	1,253	726	915	
07/05	1,314	1,136	645	1,325	778	937	
07/06	1,452	1,169	654	1,354	883	992	
07/07	1,489	1,208	707	1,397	987	1,011	
07/08	1,511	1,208	765	1,418	1,034	1,025	
07/09	1,560	1,277	794	1,448	1,065	1,064	
07/10	1,636	1,301	857	1,448	1,099	1,069	
07/11	1,639	1,399	877	1,459	1,120	1,087	

Bethel Test Fishery, Sockeye Salmon Cumulative CPUE







Lower River Tagging

Chinook Chum Sockeye Coho Caught Tagged year to date 6/3 6/4 6/5 6/6 Weather Day 6/7 6/8 6/9 6/10 6/11 6/12 6/13 6/14 6/15 6/16 6/17 Day Off 6/18 6/19 6/20 6/21 6/22 6/23 6/24 Day Off 6/25 6/26

6/27

6/28

6/29

6/30

Kalskag Tagging

Chinook

Chum Sockeve Coho

	Chin	OOK	Chum	Sockeye	Coho
	Caught	Tagged			
year					
to	2=0	260	444	00	
date	279	260	444	88	0
6/3					
6/4					
6/5	4	4	2	0	0
6/6	1	1	1	0	0
6/7	4	4	1	0	0
6/8	1	1	0	0	0
6/9	3	3	2	0	0
6/10	3	3	1	0	0
6/11	3	2	0	0	0
6/12	4	4	0	0	0
6/13	Day Off				
6/14	3	3	1	0	0
6/15	6	6	0	1	0
6/16	15	15	4	0	0
6/17	28	27	2	2	0
6/18	20	18	7	2	0
6/19	22	22	3	2	0
6/20	Day Off				
6/21	20	19	2	0	0
6/22	24	24	14	5	0
6/23	27	26	46	7	0
6/24	32	30	75	26	0
6/25	15	14	56	19	0
6/26	22	19	75	10	0
6/27	Day Off				
6/28	15	11	70	10	0
6/29	7	4	82	4	0
6/30	0	0	0	0	0

Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	aily Passag	е			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28		595	0			1	56			205
06/29		1,131	2	8		3	120			270
06/30		1,584	8	21	10	8	152			
07/01		<u>2,051</u>	<u>55</u>	<u>60</u>	<u>34</u>	<u>18</u>	<u>194</u>			
07/02		2,786	98	92	236	32	267			
07/03		3,495	170	145	237	81	523			
07/04		3,655	296	210	452	135	699			
07/05		4,855	1,152	311	852	292	768			

Escapement Goal Range: 4,100 to 7,500 Highlighted years below are when escapement goal was achieved or exceeded.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total		<u>17,619</u>	12,927	5,276	5,744	1,668	4,079			

There are no comments for the past three days.

Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	aily Passag	e			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	26	15	0		0	0	0	0	0	
06/29	66	34	0	0	0	0	0	0	0	
06/30	91	47	2	0	1	0	0	0	0	
07/01	94	<u>56</u>	<u>5</u>	1	1	<u>0</u>	1	4	1	
07/02	118	67	18	2	2	0	8	7	1	
07/03	511	68	19	2	2	3	9	7	2	
07/04	665	90	39	3	3	8	12	8	6	
07/05	744	125	70	5	6	13	12	15	12	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	2,653	1,043	374	701	362	201	284	560	193	

Salmon River (Aniak) Weir Historical Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	aily Passag	e			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28			2	1					0	42
06/29			2	1					0	49
06/30			6	1					0	68
07/01			<u>8</u>	1					2	
07/02			10	1					2	
07/03			42	2					2	
07/04			49	5					8	
07/05			55	14					14	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total			6,220	2,376					598	

There are no comments for the past three days.

George River Weir Historical Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	Daily Passag	е			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	620	72	13	15	20	10	22	121	40	27
06/29	1,012	90	49	22	23	17	22	149	63	42
06/30	1,214	281	110	31	54	25	23	183	67	43
07/01	<u>1,322</u>	<u>669</u>	<u>123</u>	<u>43</u>	<u>194</u>	<u>42</u>	<u>44</u>	<u>257</u>	<u>70</u>	
07/02	1,444	733	204	57	216	78	120	331	80	
07/03	1,848	832	283	74	261	79	207	357	82	
07/04	2,184	1,421	402	93	316	134	400	385	84	
07/05	2,386	1,621	495	115	626	351	459	535	94	

Escapement Goal Range: 1,800 to 3,300 Highlighted years below are when escapement goal was achieved or exceeded.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	<u>3,845</u>	<u>4,355</u>	<u>4,883</u>	2,698	<u>3,663</u>	1,500	1,571	<u>2,302</u>	1,219	

Kogrukluk River Weir Historical Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	aily Passag	е			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	210	0			5	3	0		0	86
06/29	291	6			9	3	13		0	102
06/30	362	31			15	3	23		0	118
07/01	<u>741</u>	<u>111</u>			<u>28</u>	<u>3</u>	<u>34</u>		1	
07/02	1,284	344			57	4	59		2	
07/03	2,135	539		0	96	6	66		2	
07/04	2,252	1,170		14	130	14	74		8	
07/05	3,327	1,681		19	313	38	87		23	

Escapement Goal Range: 4,800 to 8,800 Highlighted years below are when escapement goal was achieved or exceeded.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	21,999	<u>19,414</u>		9,730	9,701	<u>5,693</u>	6,890		1,772	

There are no comments for the past three days.

Tatlawiksuk River Weir Historical Cumulative Daily Passage of Chinook Salmon

				(Cumulative D	Daily Passag	е			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	74	29	36	2	11	4	5	1	35	161
06/29	79	33	37	3	17	19	5	3	39	182
06/30	271	75	37	5	20	19	14	4	39	184
07/01	295	98	129	8	22	20	21	4	39	
07/02	369	119	151	12	36	23	47	15	39	
07/03	850	124	223	17	37	35	91	19	39	
07/04	1,098	252	306	23	39	44	134	25	49	
07/05	1,337	299	358	30	225	82	185	31	54	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	2,920	1,700	2,061	1,071	1,071	569	1,014	1,116	495	

Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

		Cumulative Daily Passage												
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014				
06/28		1,366	68	0		254	335			160				
06/29		1,930	157	44		369	421			228				
06/30		2,433	203	76	30	584	537							
07/01		2,921	<u>421</u>	<u>122</u>	<u>97</u>	<u>853</u>	<u>729</u>							
07/02		3,745	565	200	271	1,272	998							
07/03		5,104	765	333	289	1,702	1,280							
07/04		6,369	1,160	475	741	2,277	1,493							
07/05		8,428	2,019	1,014	1,170	2,950	1,749							

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total		47,491	54,913	20,030	32,191	19,235	18,329			

There are no comments for the past three days.

Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

				(Cumulative D	Daily Passag	е			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	81	476	1		3	0	0	0	0	
06/29	163	598	1	7	3	0	2	0	0	
06/30	299	1,019	2	13	7	1	6	10	2	
07/01	<u>332</u>	<u>1,358</u>	<u>91</u>	<u>24</u>	9	<u>27</u>	<u>12</u>	<u>24</u>	2	
07/02	460	1,572	146	49	18	30	94	59	3	
07/03	1,012	1,787	165	58	32	278	152	79	11	
07/04	1,475	2,443	381	194	35	561	188	296	61	
07/05	1,802	3,201	628	328	44	995	188	539	139	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	35,696	25,652	17,286	12,550	13,671	13,042	9,828	16,981	12,911	

Salmon River (Aniak) Weir Historical Cumulative Daily Passage of Chum Salmon

	Cumulative Daily Passage												
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014			
06/28			7	0					3	19			
06/29			9	2					3	21			
06/30			31	9					3	45			
07/01			<u>36</u>	<u>16</u>					<u>5</u>				
07/02			49	20					5				
07/03			97	40					9				
07/04			128	53					34				
07/05			187	105					116				

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total			25,379	9,459					7,666	

There are no comments for the past three days.

George River Weir Historical Cumulative Daily Passage of Chum Salmon

				(Cumulative D	aily Passag	e			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	318	2,014	313	400	68	274	423	930	671	154
06/29	588	2,371	475	587	88	554	468	1,157	1,100	174
06/30	816	2,946	833	827	115	1,116	662	1,437	1,216	196
07/01	<u>967</u>	<u>4,142</u>	<u>1,074</u>	<u>1,121</u>	<u>191</u>	<u>1,692</u>	<u>1,238</u>	<u>1,886</u>	<u>1,346</u>	
07/02	1,307	4,877	1,601	1,468	257	2,149	2,081	2,414	1,676	
07/03	2,026	5,755	2,138	1,868	360	2,449	3,266	2,845	1,751	
07/04	2,462	7,353	3,120	2,321	577	2,873	4,684	3,141	2,196	
07/05	2,812	9,060	4,024	2,827	817	4,214	5,946	4,029	3,039	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	14,828	41,467	55,843	29,979	7,941	26,154	44,641	34,336	36,874	

Kogrukluk River Weir Historical Cumulative Daily Passage of Chum Salmon

	Cumulative Daily Passage													
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014				
06/28	105	336	37		58	2	57		0	208				
06/29	210	1,293	72		118	12	86		3	274				
06/30	370	2,644	116		158	27	131		26	385				
07/01	<u>768</u>	<u>4,686</u>	<u>220</u>		<u>223</u>	<u>50</u>	<u>165</u>		<u>121</u>					
07/02	1,084	7,189	395		309	64	226		192					
07/03	1,739	10,405	596	3	424	187	303		266					
07/04	2,688	15,238	1,049	123	515	513	403		420					
07/05	5,430	22,037	1,369	233	791	1,243	552		746					

Escapement Goal Range: 15,000 to 49,000 Highlighted years below are when escapement goal was achieved or exceeded.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	197,723	<u>180,601</u>	<u>49,509</u>	44,978	84,940	63,582	<u>76,386</u>		<u>66,834</u>	

There are no comments for the past three days.

Tatlawiksuk River Weir Historical Cumulative Daily Passage of Chum Salmon

				(Cumulative D	Daily Passag	e			
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28	230	1,398	468	129	98	251	311	230	311	149
06/29	360	1,862	541	210	112	631	319	517	594	173
06/30	726	3,231	684	347	132	858	539	907	716	174
07/01	939	3,689	<u>1,469</u>	<u>541</u>	<u>165</u>	<u>1,558</u>	<u>991</u>	<u>1,415</u>	<u>881</u>	
07/02	2,544	3,897	1,917	791	221	2,134	1,681	2,195	1,150	
07/03	4,924	4,661	3,059	1,098	226	2,868	2,790	2,614	1,472	
07/04	6,034	6,851	4,709	1,461	276	3,713	3,767	3,323	2,016	
07/05	7,421	7,198	6,144	1,880	770	5,171	5,053	4,467	2,818	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Season Total	55,724	32,303	83,246	30,896	19,975	36,702	84,204	44,572	32,277		

Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

		Cumulative Daily Passage									
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
06/28		1,174	118	0		650	210			174	
06/29		1,402	248	41		765	259			242	
06/30		1,594	341	71	71	860	310				
07/01		<u>1,946</u>	<u>483</u>	<u>133</u>	<u>204</u>	992	<u>363</u>				
07/02		2,293	574	231	559	1,089	437				
07/03		2,667	693	338	572	1,191	666				
07/04		2,913	898	421	1,017	1,271	847				
07/05		3,424	1,414	545	1,288	1,440	907				

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Sea	ason Total		6,733	5,262	2,451	4,230	4,239	2,031			

Date	Comments
6/28/2014	
6/29/2014	

Salmon River (Aniak) Weir Historical Cumulative Daily Passage of Sockeye Salmon

	Cumulative Daily Passage									
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
06/28			0	0					0	0
06/29			0	0					0	0
06/30			0	0					0	0
07/01			<u>0</u>	<u>0</u>					<u>0</u>	
07/02			0	0					0	
07/03			0	0					0	
07/04			0	0					0	
07/05			0	0					0	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total			2,130	1,181					966	

Day Comments

Date	Comments
6/28/2014	
6/29/2014	
6/30/2014	

Kogrukluk River Weir Historical Cumulative Daily Passage of Sockeye Salmon

		Cumulative Daily Passage									
Date	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
06/28	17	5	0		2	0	0		0	0	
06/29	23	13	1		7	0	1		0	0	
06/30	25	60	1		7	0	1		0	4	
07/01	<u>57</u>	<u>223</u>	<u>2</u>		<u>13</u>	<u>0</u>	<u>3</u>		<u>5</u>		
07/02	137	483	2		17	0	6		8		
07/03	270	919	10	0	24	0	7		8		
07/04	333	2,168	25	2	34	1	10		18		
07/05	1,152	3,010	39	7	72	6	20		54		

Escapement Goal Range: 4,400 to 17,000 Highlighted years below are when escapement goal was achieved or exceeded.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Season Total	<u>37,939</u>	60,807	<u>16,526</u>	<u>19,675</u>	23,785	13,997	8,135		7,882	

Day Comments

Date	Comments
6/28/2014	
6/29/2014	
6/30/2014	

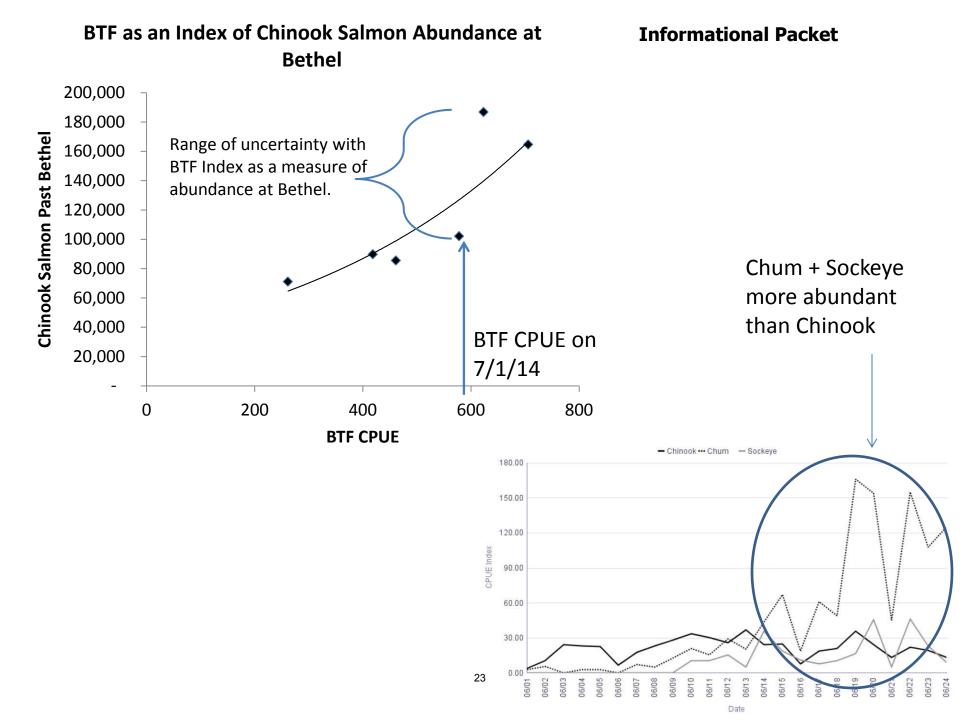
Telaquana River Weir Historical Cumulative Daily Passage of Sockeye Salmon

		Cumulative Daily Passage								
Date	2010	2011	2012	2013	2014					
06/28	0									
06/29	0									
06/30	0									
07/01	<u>0</u>			<u>0</u>						
07/02	0			0						
07/03	0			0						
07/04	0			0						
07/05	0		0	0						

	2010	2011	2012	2013	2014
Season Total	72,020	35,105	22,994	27,806	

What Does BTF Tell Us

- Index of the number of fish (Kings, or Sockeye, or Chum) that <u>passed the test fish location</u> (Bethel).
 - Changes in harvest patterns do not change this
 - End of season relationship should be consistent with other years
- Relative abundance of each species to one another (ratio) on each day.
 - Chinook CPUE : Chum & Sockeye CPUE



Shifting Interpretation

- As with any year, early information is inconclusive.
 - Even more so this year because of different harvest pattern
- We become more confident as the season progresses.
 - Generally after the peak of the run, we become more confident.
 - This year identifying run timing was more difficult.
- At the end of the season BTF CPUE should fit the relationship with abundance at Bethel

Early Season

- It was expected that the lack of harvest early would result in larger Daily CPUE than in other years.
 - How much larger?? 2-6 times possibly
 - Larger numbers early on indicate more fish are making it past Bethel, in relation to other years
- It was expected that the lack of harvest would affect run timing, by shifting it earlier.
 - It was impossible to compare BTF CPUE with other years to build an expectation of total run
 - Run timing assessment: Early run, lack of harvest

Informational Packet Mid Season

- Larger BTF CPUE indicates that more fish are passing
- Run timing interpretation is difficult
 - Early run timing AND harvest effect
 - Projecting end of season values even more uncertain
- In lieu of projecting, we want to see a real number at BTF that would indicate enough Chinook salmon were already past to achieve escapement
 - Incidental harvest below Bethel incorporated in BTF CPUE
 - Must consider incidental harvest above
- Looking for chum and sockeye to become more abundant than Chinook salmon for opportunity on other salmon species

Bethel Test Fish Index – Update June 30, 2014

Bill Bechtol, AVCP

Current Status – The cumulative count for the Bethel Test Fishery (BTF) through June 29, 2014 was 573 Chinook salmon. During the years of higher gear catchability beginning in 2008, this cumulative count was exceeded only in 2009 (606 fish through June 29). For comparison, I also rescaled the cumulative counts for the years 1999 to 2007 to adjust for what counts might have been through June 29 if the higher catchability gear has been used. Results suggest that cumulative counts in the years 2001-2007 would also have exceeded our current cumulative CPUE count. So despite the strong early BTF counts, the current cumulative count would only be around the average for values on June 29 over the last 15 years. The daily counts still seem to be quite variable, although trending downward over the past 10 days. The midpoint of the runs going back to 1984 has typically been around June 22, which we are well past now. Even an increase in the cumulative BTF count by another 150 fish, something I unlikely to happen, would only place the midpoint of this year's run around June 15-18.

Run Timing Considerations - Using the cumulative BTF count to date, combined with a run timing model, provides a rough estimate of the 2014 end-of-year cumulative BTF count. For each day since June 1, Figure 1 below shows counts as daily (blue dashed line), cumulative (red dash-dot line), and projected end-of-year (green solid line). This figure only shows a projection based on an early run timing (vs. 2013 when managers presumed a late run). Note that large early counts resulted in large end-of-year cumulative projections. But end-of-year projections dropped when the daily counts did not continue to rise. Each additional day of smaller daily counts will cause the cumulative BTF count to fall until they are equal at end of the season. But the rate of this drop depends on the assumed run timing. Using average or late run timing will give higher end-of-year projections because fish are expected to be caught by the BTF into late July or August. But with each passing day of declining counts, even those end-of-year predictions will fall.

Escapement Regression - A next step is using the projected end-of-year BTF cumulative to predict end-of-year escapement. As a reminder, the drainage-wide escapement goal for Kuskokwim Chinook is 65,000-120,000 fish, estimated by the run reconstruction model. Escapement goals were not met in 2013 for the 6 tributaries with weirs or the drainage-wide Kuskokwim; 2013 escapements to the 6 tributaries ranged from 7% to 33% of the average over the previous decade. Table 1 below shows results of several regressions (equations relating two or more variables) between the BTF end-of-year counts and drainage-wide Chinook escapement. Linear relationships (straight lines) have historically been used for Kuskokwim Chinook, but are likely biased at very high and low counts. Non-linear relationships (curved lines) fit the data better, but are more complex. The lack of fishing pressure inflates the 2014 BTF counts because fish that would normally be removed have reached the BTF site. Results are shown within "adjustment groups" to account for the lack of fishing effort. For the years 2008–2013, subsistence harvests removed an average of 42.7% of the total return with harvest location divided approximately equally above and below the BTF site. Corrections are "none" for an adjustment of 1.00, 21% for a 0.79 adjustment, and 57% for a 0.43 adjustment. Within an adjustment group, the estimates are fairly similar. I think the most realistic adjustment is something more than "none" but less than 0.79. The bottom line is the end-of-year escapement

is likely to be something less than the midpoint of the escapement goal range. Plus, the escapement estimate will likely continue to decline as daily counts decline. Given the poor returns in recent years, a conservative approach that maximizes the number of fishing reaching the spawning grounds is still needed for stock rebuilding.

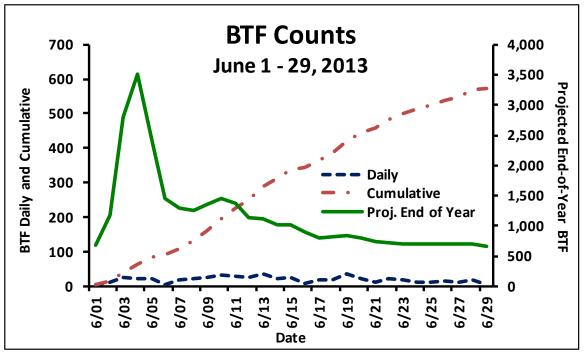


Figure 1. Adjustments by date of the daily and cumulative Bethel Test Fishery counts and the end-of-year cumulative projections, June 1-29, 2013.

Table 1. Preliminary escapement estimates based on inseason run timing projections, June 29, 2013.

		Early Run Timing	
Regression model	very early	average early	<u>late-early</u>
		Adjustment = 1.00	
2008-2013 linear	101,291	111,454	119,679
1999-2013 linear	102,959	106,937	110,157
1999-2013 Polynomial	103,634	108,367	112,166
		Adjustment = 0.79	
2008-2013 linear	77,441	85,435	91,904
1999-2013 linear	93,625	96,754	99,286
1999-2013 Polynomial	92,366	96,168	99,227
		Adjustment = 0.57	
2008-2013 linear	53,592	59,416	64,129
1999-2013 linear	84,290	86,570	88,414
1999-2013 Polynomial	80,870	83,698	85,977

Escapement goal is 65,000-120,000 Chinook drainage-wide.

ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES





Cora Campbell, Commissioner Jeff Regnart, Director



Contact:

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Phone: (907) 543-2433 Toll Free: 855-933-2433 Fax: (907) 543-2021 Kuskokwim Area Office P.O. Box 1467 Bethel, AK 99559 Date Issued: July 1, 2014

Time: 1:30 p.m.

Kuskokwim River Salmon Fishery Update #3 Kuskokwim River Inseason Assessment and Run Status

This is an announcement from the Alaska Department of Fish and Game in Bethel for subsistence fishermen in the Kuskokwim Area.

All Bethel Test Fishery and escapement numbers can be found online at: http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#/fishcounts

Bethel Test Fishery

Bethel Test Fishery continues to operate on schedule. The cumulative Catch Per Unit Effort as of June 30, 2014 is 579 which is higher than the recent five year average for this date of 378. Daily numbers continue to decline, indicating the Chinook salmon run is coming to an end.

Summary

- Bethel Test Fishery numbers in 2014 are <u>not</u> directly comparable to previous years.
- Increasing numbers of chum and sockeye relative to Chinook salmon over the last week have allowed us to open more opportunity with <6"-mesh.
- Based on BTF data and information about the recent subsistence harvest, state and federal
 managers are cautiously optimistic that the drainage-wide escapement goal will be
 achieved.

Lower Kuskokwim River Chinook Salmon Tagging

In an effort to understand the migration speed of Chinook salmon through the lower Kuskokwim River, ADF&G is conducting a new pilot project below Johnson River. This project uses 7.5" & 8" drift gillnets to capture and live release Chinook salmon with tags attached to monitor their migration upriver. As of June 30, the crew has tagged 74 Chinook salmon.

Preliminary results of 15 tagged Chinook salmon, suggest these fish take about 3 days to migrate from the Johnson River area, past Bethel. Some fish took as long as 7 days to make the trip. Aerial telemetry was conducted on June 24th to monitor fish movement upriver. Tags were successfully located in the mainstem Kuskokwim River past Kalskag, and in the Kwethluk River.

These fish are identifiable by a plastic tag attached to their back, and a metal antennae coming out of their mouth. If you find one of these tagged fish, please call the number on the plastic tag, and you will be entered into a monthly cash drawing of \$200, and a seasonal cash drawing of \$500.

Kalskag Area Fish Wheel /Drift Gillnet Tagging; ADF&G, KNA

Similar to other years this project has operated, we are cooperating with Kuskokwim Native Association to tag Chinook salmon using fish wheels and drift gillnets near Kalskag. Tagged fish that are later recovered at weir projects, allow for ADF&G to estimate the total abundance of Chinook salmon in the middle and upper Kuskokwim River. As of June 30, the crew has tagged 260 Chinook salmon.

These fish are identifiable by a plastic tag attached to their back, and a metal antennae coming out of their mouth. If you find one of these tagged fish, please call the number on the plastic tag, and you will be entered into a monthly cash drawing of \$200, and a seasonal cash drawing of \$500.

Kuskokwim River Sonar Investigation

In early July, ADF&G staff will survey the lower Kuskokwim River from the Kwethluk "Y" to Johnson River looking for potential sites for a main stem sonar site. We will identify possible sites, and briefly test sonar systems in these locations to see if the technology is able to work.

Kwethluk River Salmon Monitoring; USFWS

This monitoring station is located on the Kwethluk River and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. This project became operational on the evening of June 25, which is earlier than 3 of the past five years. The crew has counted 270 Chinook salmon through June 30, which is higher than the recent five year average of 19. There have also been 68 sockeye, and 160 chum salmon counted.

Tuluksak River Salmon Monitoring; USFWS

This monitoring station is located in the Tuluksak River drainage and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. The first full day of counts was June 30.

Salmon River Weir; ADF&G, KNA

This weir is located in the Aniak River drainage and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. This project became operational on the evening of June 26, which is earlier than recent years when Chinook arrived. The crew has counted 68 Chinook salmon through June 30, which is higher than any other year to date. There have also been 45 chum salmon counted.

George River Weir; ADF&G, KNA

This weir is located in the George River drainage and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. This weir began operations on June 16th, and has counted 43 Chinook salmon through June 30, which is lower than the recent five year average of 64 for this date. There have also been 196 chum salmon counted past the weir.

Tatlawiksuk River Weir; ADF&G, KNA

This weir is located in the Tatlawiksuk River drainage and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. This weir began operations on June 14th, with 3.5 days of no operation due to high water. The crew has counted 184 Chinook salmon through June 30, which is higher than the recent five year average of 19 for this date. There have also been 174 chum salmon counted past the weir.

Kogrukluk River Weir; ADF&G

This weir is located in the Holitna River drainage and monitors salmon passage to spawning areas, as well as serving as a recapture site for tagged Chinook salmon. This weir began operations on June 20th, and has counted 118 Chinook salmon through June 30. This project has only operated this early in 1 of the last 5 years, and in 2011 the cumulative count was 23 for this day. There have also been 4 sockeye and 385 chum salmon counted past the weir.

Summary

Escapement is starting to show at the weirs, but it is too early to give indication of the expected escapement from these projects. We will continue to monitor escapement throughout the year, and hope weather conditions allow for continuous operation.

Further announcements will be made from the Bethel Fish and Game office, on the State of Alaska web site (http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main), and local radio stations. News releases will be faxed to area villages and local fish processing companies. For additional information or questions regarding Kuskokwim Area fisheries, contact the Alaska Department of Fish and Game office in the Bethel at 543-2433 or toll free at 1-855-933-2433.