#### 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: 06/14/2023

Time: 10:00 a.m.–12:00 p.m.

Place: ADF&G Office, Bethel, AK

Time Called to Order:

#### **ROLL CALL TO ESTABLISH QUORUM:** QUORUM MET? Yes / No

Chair:

Upriver Elder: Downriver Elder: Commercial Fisher: Lower River Subsistence: Middle River Subsistence: Upper River Subsistence: Headwaters Subsistence: Member at Large 1: Member at Large 2: Sport Fisher: Western Interior RAC: Y-K Delta RAC: KRITFC: ADF&G:

**INTRODUCTIONS:** 

INVOCATION: APPROVAL OF MINUTES: Optional. ADF&G does not prepare official meeting minutes. APPROVAL OF AGENDA: the agenda may be amended at this time. USFWS/KRITFC UPDATE: ADF&G MANAGEMENT ACTIONS UNDER CONSIDERATION: PEOPLE TO BE HEARD: Non-Working Group Members CONTINUING BUSINESS:

- Subsistence Reports: Lowest River, ONC Inseason Subsistence Report, Lower River, Middle River, Upper River, Headwaters
- Inseason Harvest Report
- Overview of Kuskokwim River salmon run assessment:
  - a. Test Fisheries (Bethel and Aniak):
  - b. Sonar/Weirs/Aerial Surveys/Other:
  - c. Subsistence Division Project Update:
  - d. NVN Report:
- Working Group KRITFC Representative Report:
- Commercial Catch Report: N/A
- Processor Report: N/A
- Sport Fish Report:
- Intercept Fishery Report: optional
- Weather Forecast:
- Discussion of ADF&G Management considerations and discussion of possible alternatives (recommendations from the Working Group):
- Motion for Discussion and Action:

#### **OLD BUSINESS:**

#### **NEW BUSINESS:**

#### **COMMENTS FROM WORKING GROUP MEMBERS:**

NEXT MEETING DATE:	Time:	Place:	

## **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.

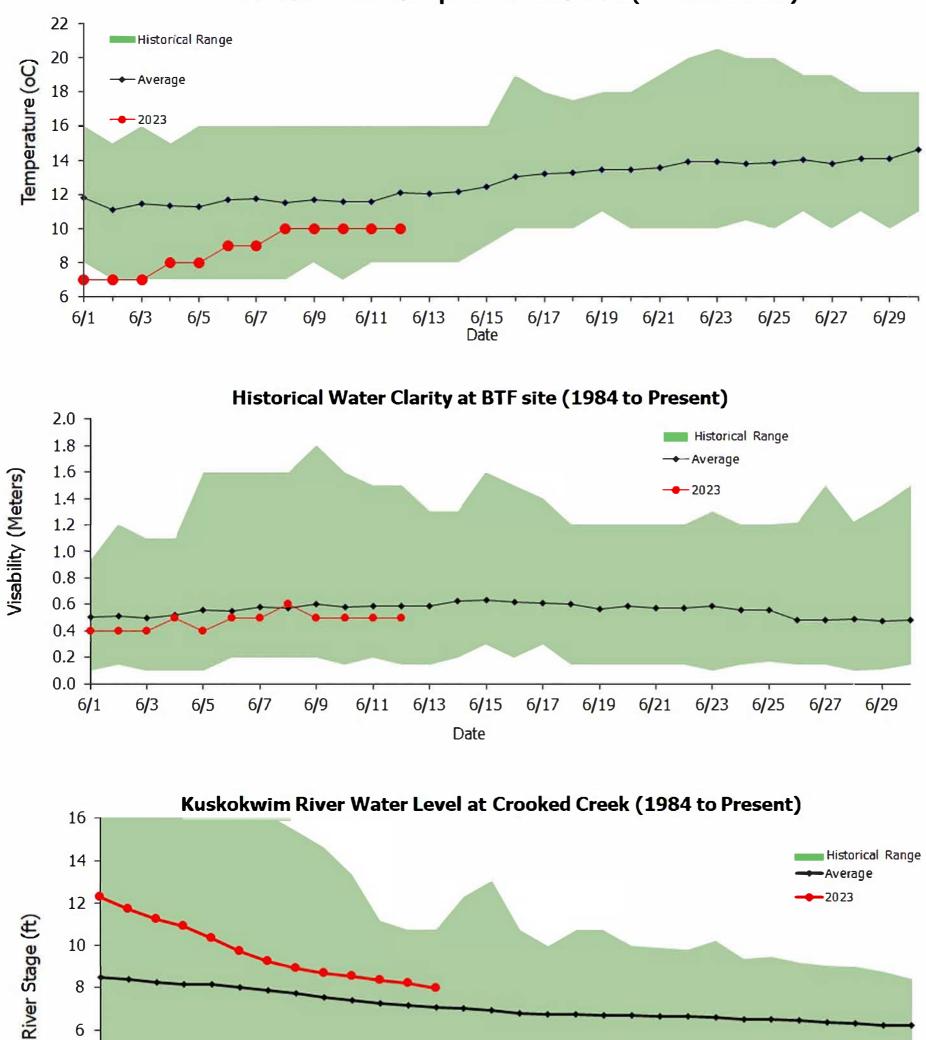
**Misuse** of Packet information can contribute to misunderstandings that can **cause harm to salmon users** and potentially **damage salmon resources**.

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=commercialbyarea kuskokwim.kswg

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

Thank you, Savannah Hollingworth Working Group Coordinator



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6/15 Date 6/17

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## Historical Water Temperature at BTF Site (1984 to Present)

# Kuskokwim River Salmon Assessment Update6/12/2023





This document presents the key assessment information considered by managers in-season. The production of this document is a collaborative effort between USFWS and ADF&G. All data and analyses contained are preliminary and are subject to change, so please make interpretations carefully.

If you have any questions about the content, please contact Spencer Rearden (USFWS; spencer\_rearden@fws.gov) or Sean Larson (ADF&G; sean.larson@alaska.gov). Major credit for the development of this data packet belongs to Benjamin Staton.

#### Table of Contents:

#### **Bethel Test Fishery Summaries**

- Page 2: Chinook Salmon
- Page 3: Chum Salmon
- Page 4: Sockeye Salmon

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- Page 6: Percent Composition

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#### Abbreviations:

- BTF: Bethel Test Fishery
- ATF: Aniak Test Fishery
- CPUE: Catch-per-unit-effort
- EOS: End-of-Season
- ADF&G: Alaska Department of Fish and Game
- KRITFC: Kuskokwim River Inter-tribal Fisheries Commission
- OTNC: Orutsaramiut Traditional Native Council
- USFWS: United States Fish and Wildlife Service
- YDNWR: Yukon Delta National Wildlife Refuge

#### To view escapement information, please visit the ADF&G Kuskokwim River Fish Counts page:

• http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts

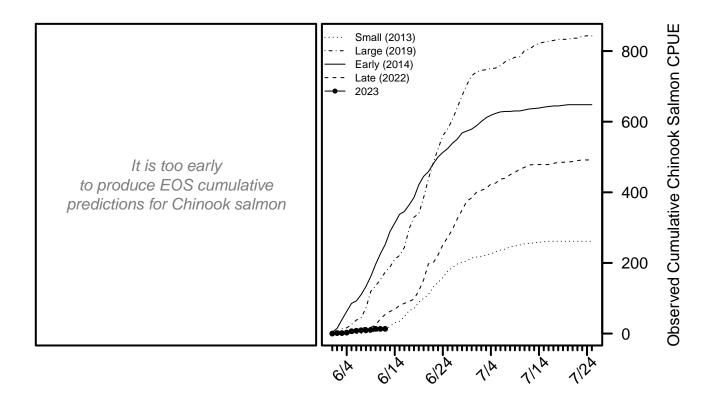
#### For the most up-to-date information regarding fishing opportunities please visit:

- USFWS: https://www.fws.gov/refuge/yukon\_delta/wildlife\_and\_habitat/dailyupdate.html
- **ADF&G:** http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main

## Chinook Salmon BTF Summary (6/12)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now 13.
- 14% years since 2008 fell below this cumulative CPUE on this date.
- 12% of the run is complete based on historical average run timing.
- 7% 19% of the run is complete based the central 50% of all historical run timing scenarios.
- 12% 18% of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up 100% of the BTF catches, compared to 56% on average.

Chinook Salmon Figure 1. *Left*: will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right*: The cumulative BTF CPUE from 2023 plotted along with four previous years intended to represent a range of early/late and small/large index values.

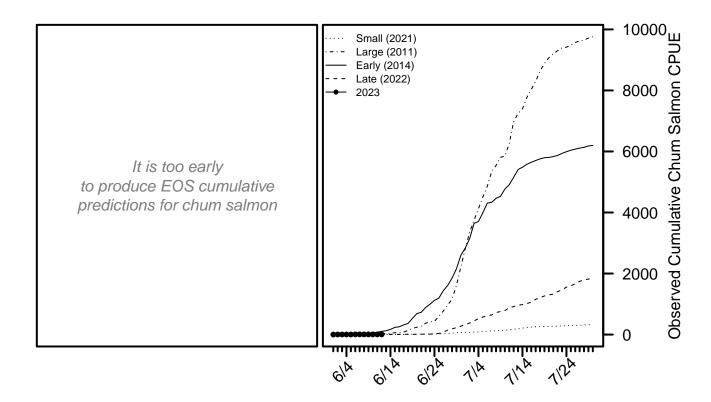


For more detailed information, see the *Chinook salmon appendix* at the end of this document. **Return to Table of Contents** 

## Chum Salmon BTF Summary (6/12)

- The BTF daily CPUE was  ${\bf 0}.$
- The BTF cumulative CPUE is now **5**.
- 14% years since 2008 fell below this cumulative CPUE on this date.
- $<\!\!1\%$  of the run is complete based on historical average run timing.
- <1% 1% of the run is complete based the central 50% of all historical run timing scenarios.
- 1% 3% of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up 0% of the BTF catches, compared to 28% on average.

**Chum Salmon Figure 1.** *Left*: will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right*: The cumulative BTF CPUE from 2023 plotted along with four previous years intended to represent a range of early/late and small/large index values.

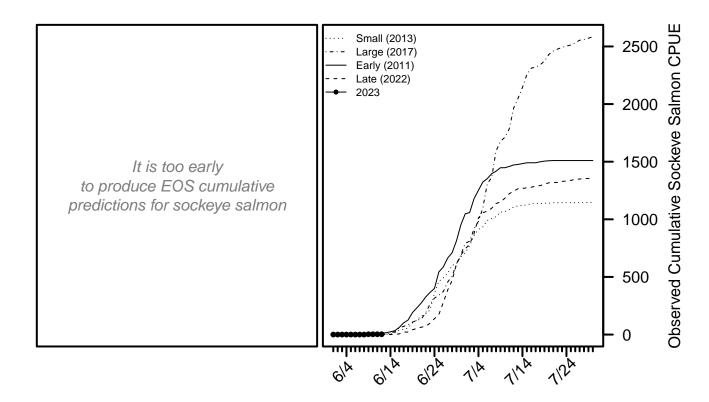


For more detailed information, see the **chum salmon appendix** at the end of this document. **Return to Table of Contents** 

## Sockeye Salmon BTF Summary (6/12)

- The BTF daily CPUE was  ${\bf 0}.$
- The BTF cumulative CPUE is now  $\mathbf{3}$ .
- 50% years since 2008 fell below this cumulative CPUE on this date.
- 1% of the run is complete based on historical average run timing.
- <1% 2% of the run is complete based on the central 50% of all historical run timing scenarios.
- 2% 8% of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up 0% of the BTF catches, compared to 17% on average.

**Sockeye Salmon Figure 1.** *Left*: will show predicted cumulative EOS BTF CPUE according to various run timing scenarios when enough data have been collected. *Right*: The cumulative BTF CPUE from 2023 plotted along with four previous years intended to represent a range of early/late and small/large index values.

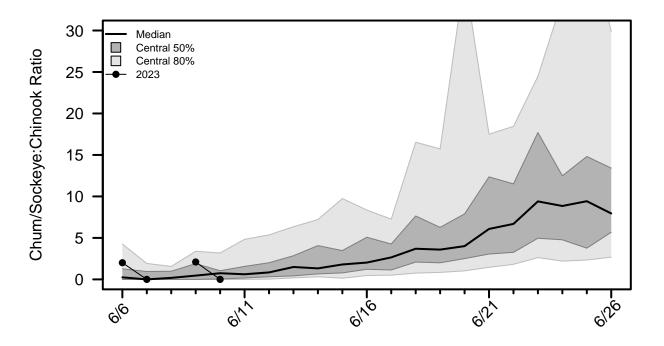


For more detailed information, see the **sockeye salmon appendix** at the end of this document. **Return to Table of Contents** 

### Chum/Sockeye:Chinook Salmon Ratio

This ratio is calculated by dividing the total number of chum and sockeye salmon counted by the number of Chinook salmon counted by a project each day. A value of zero indicates Chinook salmon were counted that day, but not chum or sockeye salmon. A missing value on a day the project operated indicates no Chinook salmon were counted that day.

Species Ratio Figure 1. Time series of the species ratio with historical quantiles shown as grey regions and the ratio time series for 2023 shown with points connected by lines.



Ratio Table 1. A subset of the species ratios displayed in Ratio Figure 1, including the ratios from the ATF.

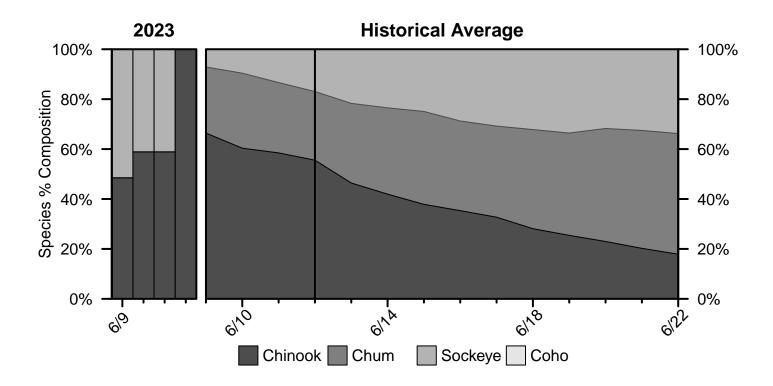
Date	$2023~\mathrm{BTF}$	BTF Median	BTF Lower $10\%$	BTF Upper $10\%$	2023 ATF
6/9	2.1	0.46	0	3.39	_
6/10	0	0.74	0	3.18	0
6/11	—	0.62	0	4.83	_
6/12	_	0.84	0.04	5.36	—
6/13		1.5	0.18	6.35	
6/14		1.33	0.32	7.21	
6/15		1.8	0.14	9.75	

**Ratio Table 2.** The percent of previous years in which a given species ratio was exceeded at least once before a certain day in the BTF.

Date	Ratio $> 1$	Ratio $> 3$	Ratio $> 5$	Ratio $> 10$	Ratio $> 20$
6/9	64%	26%	8%	3%	3%
6/10	67%	33%	10%	3%	3%
6/11	72%	41%	15%	3%	3%
6/12	74%	41%	$\mathbf{23\%}$	3%	3%
6/13	79%	46%	31%	5%	3%
6/14	82%	59%	38%	8%	3%
6/15	87%	67%	44%	15%	3%

## Percent Composition by Salmon Species

**Percent Composition Figure 1.** Species percent composition in the BTF from 2023 and based on the historical average. The composition presented on each day represents the average composition over the past 2 days.



## Chinook Salmon Appendix

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
6/9	11	17	38	40	119	49	50
6/10	13	24	63	57	135	63	61
6/11	13	42	74	64	153	76	71
6/12	13	<b>54</b>	87	<b>72</b>	174	<b>91</b>	82
6/13		63	98	73	188	103	94
6/14		68	111	83	211	117	106
6/15		80	119	93	221	132	124
EOS		504	532	487	848	608	562

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
6/9	0	0	0	0	27
6/10	7	0	0	0	33
6/11	7	0	0	0	114
6/12	7	0	16	0	<b>218</b>
6/13		0	16	0	328
6/14		0	42	7	403
6/15		8	79	41	569
EOS		$1,\!277$	$1,\!891$	$1,\!874$	$1,\!691$

Chinook Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/12 Cumulative $%$
Earliest	6/14	37%
Early 10%	6/18	27%
Early $25\%$	6/21	19%
Median	6/22	12%
Late $25\%$	6/25	7%
Late 10%	6/26	4%
Latest	7/3	2%

## Chum Salmon Appendix

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
6/9	5	0	0	8	0	6	10
6/10	5	6	0	12	11	10	15
6/11	5	6	0	12	15	14	18
6/12	5	6	0	12	15	16	<b>23</b>
6/13		6	3	12	16	22	30
6/14		6	8	12	19	30	39
6/15		6	8	12	19	47	58
EOS		$2,\!193$	327	$1,\!442$	$6,\!427$	3,720	$5,\!590$

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
6/9	0	0	0	0	0
6/10	0	0	0	0	0
6/11	0	0	0	0	0
6/12	0	0	0	0	0
6/13		0	0	0	5
6/14		0	0	13	5
6/15		0	0	13	5
EOS		952	267	$2,\!611$	$1,\!051$

Chum Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/12 Cumulative $%$
Earliest	6/23	4%
Early 10%	7/1	2%
Early $25\%$	7/3	1%
Median	7/6	<1%
Late $25\%$	7/9	<1%
Late 10%	7/11	<1%
Latest	7/16	<1%

## Sockeye Salmon Appendix

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
6/9	3	0	3	0	0	1	1
6/10	3	0	3	0	0	1	2
6/11	3	0	5	1	4	3	4
6/12	3	0	8	1	6	4	6
6/13		0	8	1	8	5	8
6/14		0	8	1	11	6	13
6/15		3	16	1	11	9	21
EOS		$1,\!372$	$1,\!694$	1,060	$2,\!685$	$1,\!817$	1,747

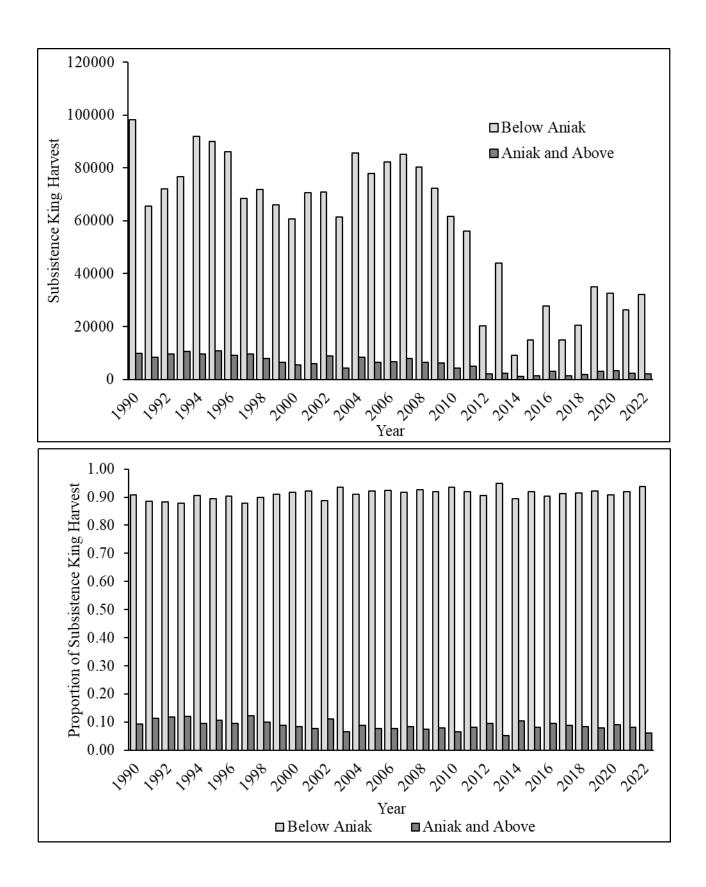
Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Sockeye Salmon Table A2. Cumulative CPUE from the ATF.

Date 2	$\frac{023}{0}$	$\frac{022}{0}$	21 202	0 2019
	0	0		
6/9		0 0	0 0	0
6/10	0	0	0 0	0
6/11	0	0	0 0	0
6/12	0	0	0 0	0
6/13		0	0 0	0
6/14		0	0 0	0
6/15		0	0 0	0
EOS	1	29 24	41 209	) 33

Sockeye Salmon Table A3. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	6/12 Cumulative $%$
Earliest	6/22	8%
Early 10%	6/24	4%
Early $25\%$	6/27	2%
Median	6/29	1%
Late $25\%$	7/2	<1%
Late 10%	7/6	<1%
Latest	7/10	$<\!1\%$



## Alaska Peninsula Inseason Commercial Harvest Estimates

https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareaakpeninsula.salmonharvestsummary

#### ESTIMATED SALMON CATCH TO DATE BY GEOGRAPHIC AREA / FISHERY, WITHIN THE ALASKA PENINSULA MANAGEMENT AREA

South Peninsula	Chinook	Sockeye	Coho	Pink	Chum
Post June Cold Bay	0	0	0	0	0
Post June Thin Point Section	0	0	0	0	0
Post June Morzhovoi Bay to South Unimak	0	0	0	0	0
Post June Shumagin Islands	0	0	0	0	0
Southeastern District Mainland	0	0	0	0	0
Northwest Stepovak Section (7/1-7/25)	0	0	0	0	0
Dolgoi Island Area1	0	0	0	0	0
Dolgoi Island Area2	0	0	0	0	0
June Shumagin Islands	9	16,485	1	811	1,769
June South Unimak	65	6,832	0	349	1,005
	74	23,317	1	1,160	2,774

#### Sunday, June 11, 2023