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: **06/7/2023** **Time**: **10:00 a.m.–12:00 p.m.** Place: **ADF&G Office, Bethel, AK**

Time Called to Order: Chair:

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

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 (ONC/KRITFC)
- 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:
- Sport Fish Report:
- 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:

- **Recruitment for vacant positions.**

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

June 7, 2023, ADF&G management actions under consideration:

- **Subsistence Sections 4 and 5** (From a line between regulatory markers at the Yukon Delta National Wildlife Refuge boundary near Aniak to the headwaters of the Kuskokwim River):

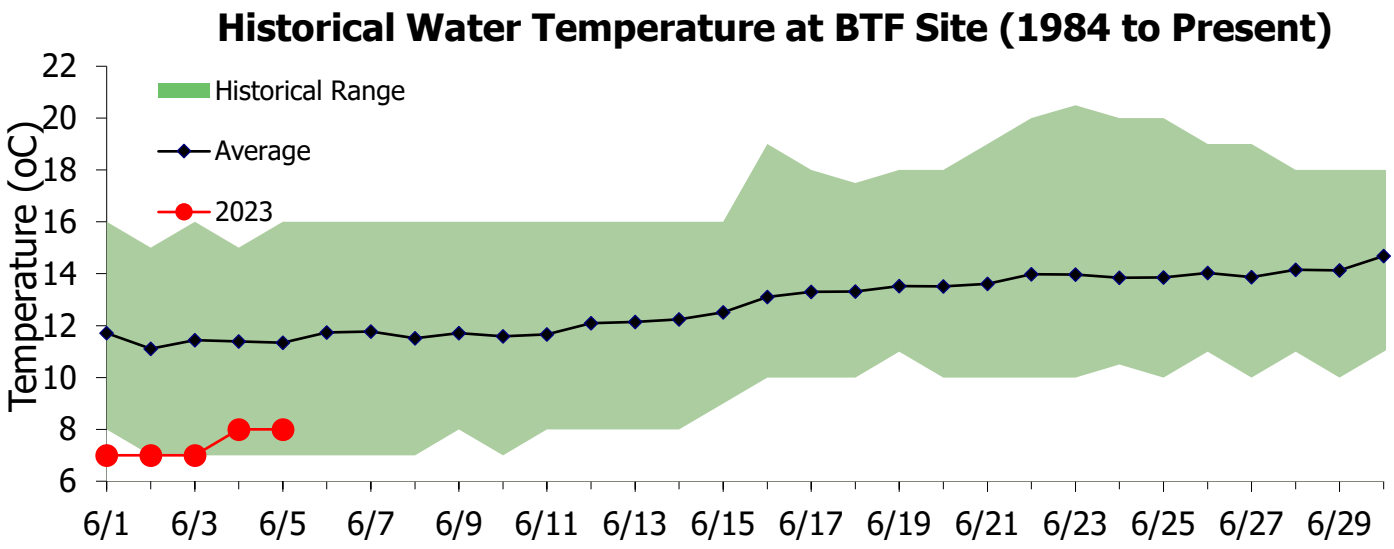
    - **Subsistence fishing will open with 6-inch or less mesh gillnets (set or drift), not to exceed 25 fathoms in length and 45 meshes in depth beginning 12:01 a.m. June 12, 2023, until further notice.**

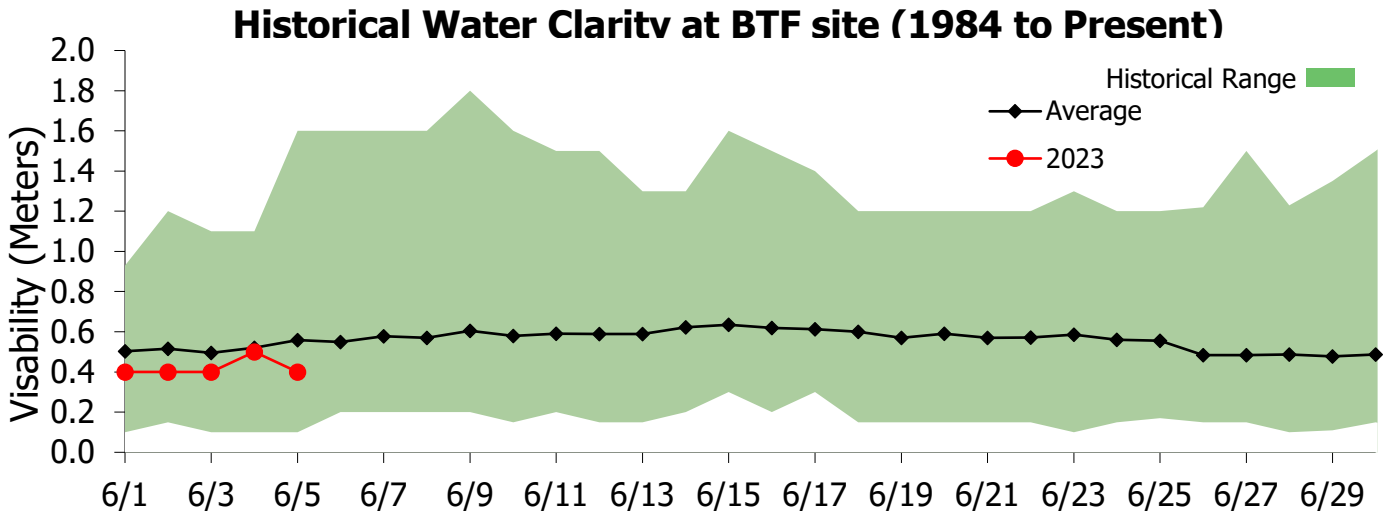
    - King salmon may be retained if caught with fish wheels, dip nets, beach seines, and hook and line beginning **12:01 a.m. June 12, 2023, until further notice**.

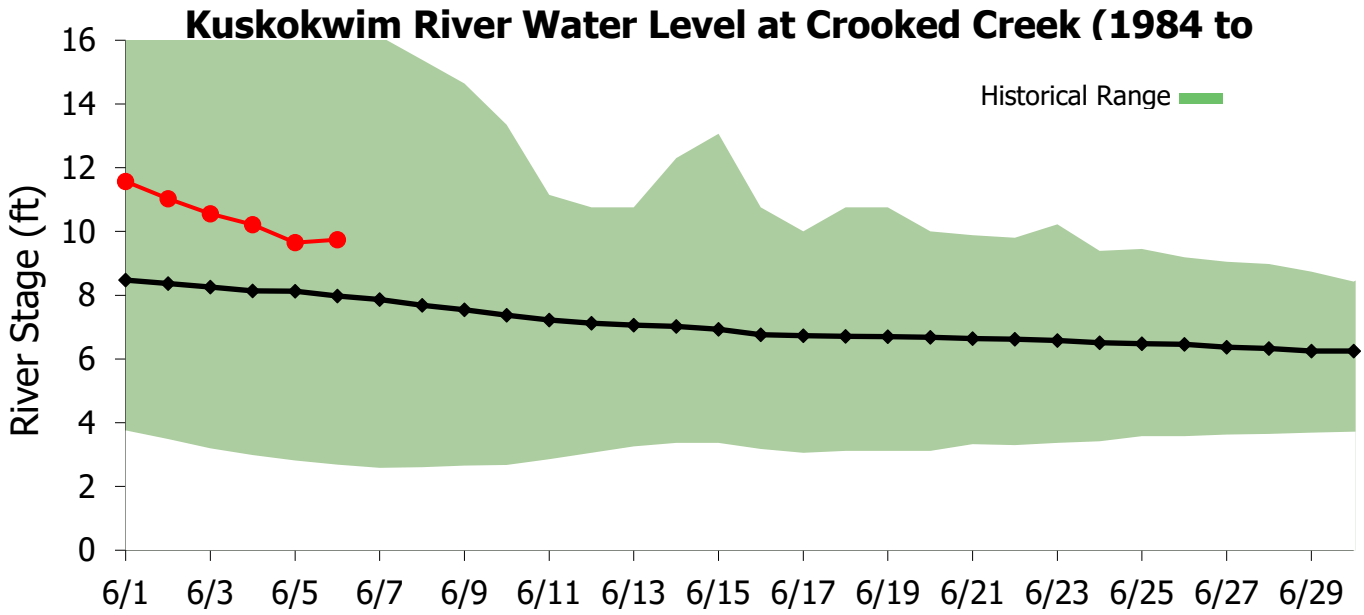
    - **Aniak Box:** The waters of the Kuskokwim River from the Yukon Delta NWR boundary at Aniak upstream to a line formed between two points lat 61° 35.308′ N, long 159° 29.167′ W and lat 61° 34.731′ N, long 159° 28.939′W (Figure 1) **will remain closed to subsistence fishing with gillnets until further notice.** Subsistence fishing with hook and line, fish wheels equipped with a live box or chute, beach seines and dip nets is allowed, **but all king salmon caught must be returned to the water alive**. These closed waters are in place to help provide protection for king salmon bound for the Aniak River.

The preseason forecast of Kuskokwim River king salmon is for a range of 115,000 to 170,000 fish. Current assessment and harvest reports indicate that the king salmon run is just beginning to build in the lower Kuskokwim River, which is consistent with historical information. As of June 5, the Bethel test fishery cumulative CPUE for king salmon was 7.

Annual king salmon harvest in subsistence sections 4 and 5 has ranged from 1,303 to 3,234 king salmon since 2015. When factoring in the number of households in this section of the river, the annual harvest of king salmon is less than 7 king salmon per household. To put total harvest in sections 4 and 5 into perspective, the June 12, 2022, lower river fishing period harvested more king salmon than the total harvest in sections 4 and 5.


Historical Water Temperature at BTF Site (1984 to Present)
Historical Range
Average
2023
Temperature (oC)
22
20
18
16
14
12
10
8
6
6/1
6/3
6/5
6/7
6/9
6/11
6/13
6/15
6/17
6/19
6/21
6/23
6/25
6/27
6/29


Historical Water Claritv at BTF site (1984 to Present)
Historical Range
Average
2023
Visability (Meters)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6/1
6/3
6/5
6/7
6/9
6/11
6/13
6/15
6/17
6/19
6/21
6/23
6/25
6/27
6/29


Kuskokwim River Water Level at Crooked Creek (1984 to
Historical Range
River Stage (ft)
16
14
12
10
8
6
4
2
0
6/1
6/3
6/5
6/7
6/9
6/11
6/13
6/15
6/17
6/19
6/21
6/23
6/25
6/27
6/29

Kuskokwim River Salmon Assessment Update
6/5/2023

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.

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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

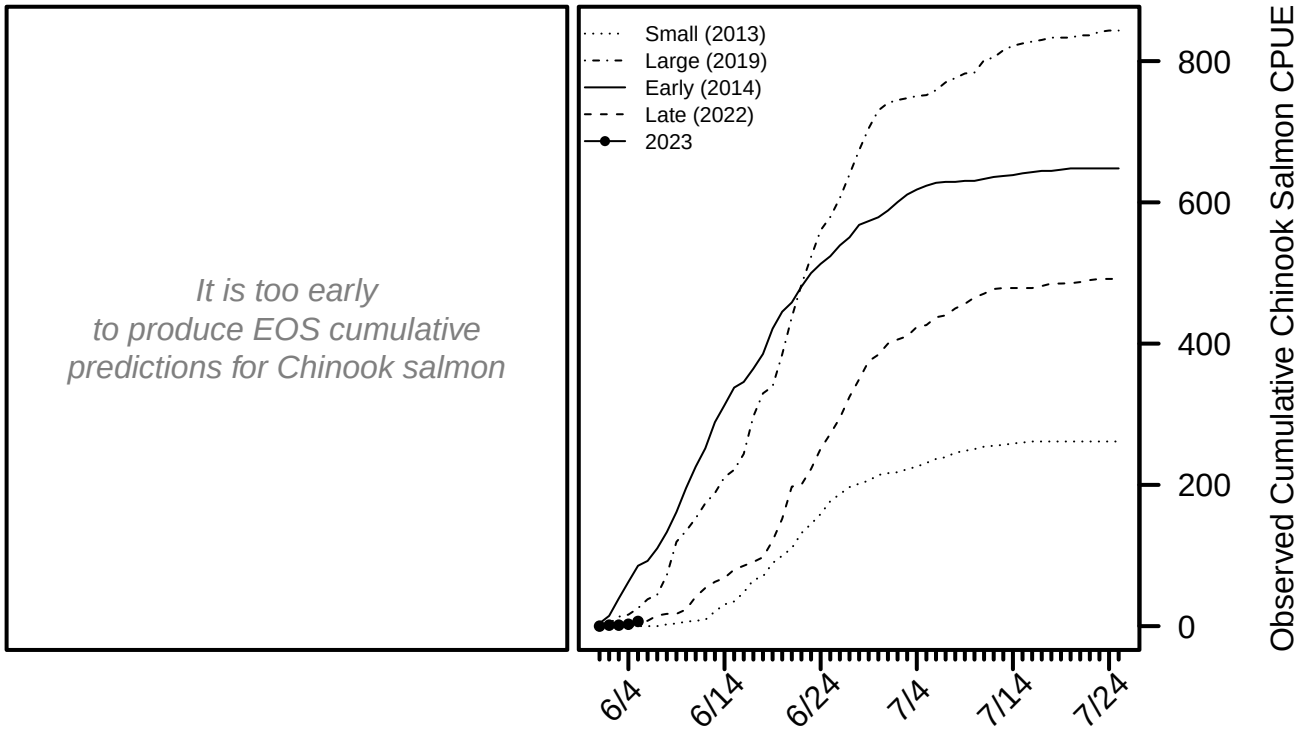
For the most up-to-date information regarding fishing opportunities please visit:

- **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 (6/5)

- The BTF daily CPUE was **4**.
- The BTF cumulative CPUE is now **7**.
- **43%** years since 2008 fell below this cumulative CPUE on this date.
- **1%** of the run is complete based on historical average run timing.
- **<1% - 3%** of the run is complete based the central 50% of all historical run timing scenarios.
- **4% - 10%** 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 **74%** 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.*

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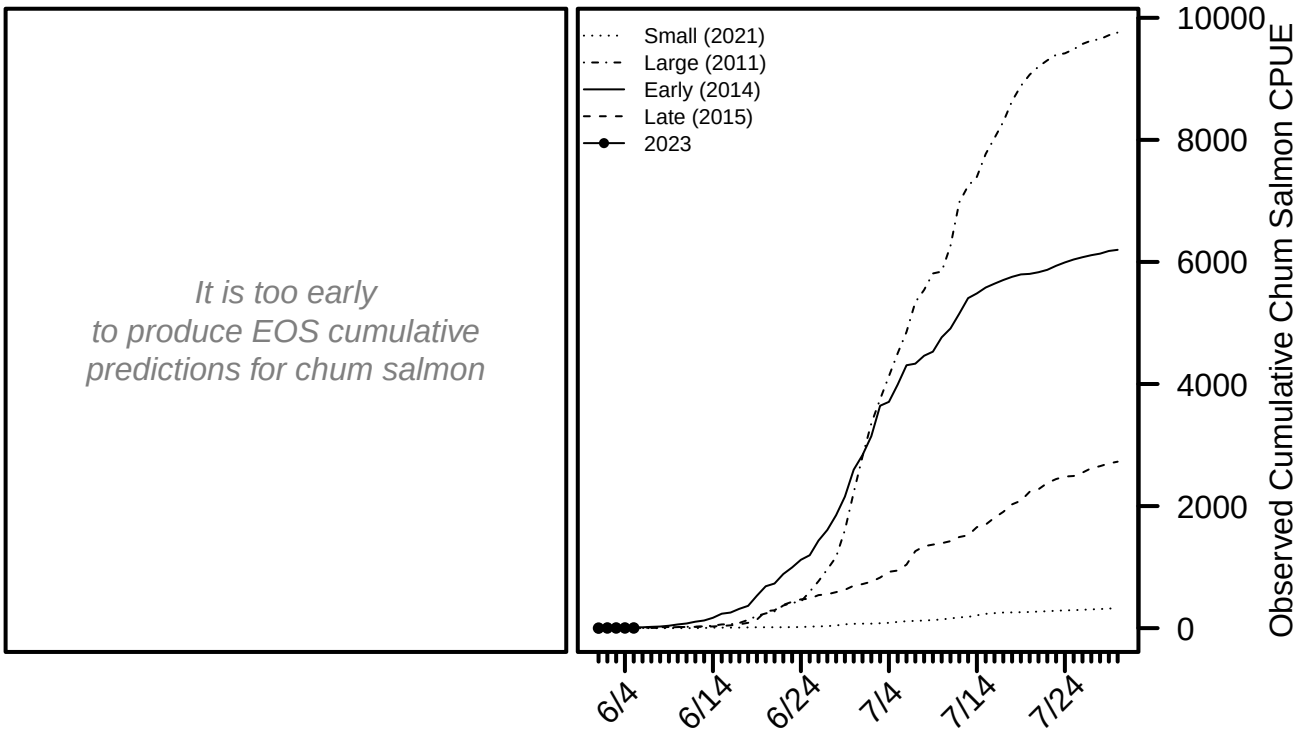
Chum Salmon BTF Summary (6/5)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now **3**.
- **71%** 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.
- **0% - 1%** 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 **23%** 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.*

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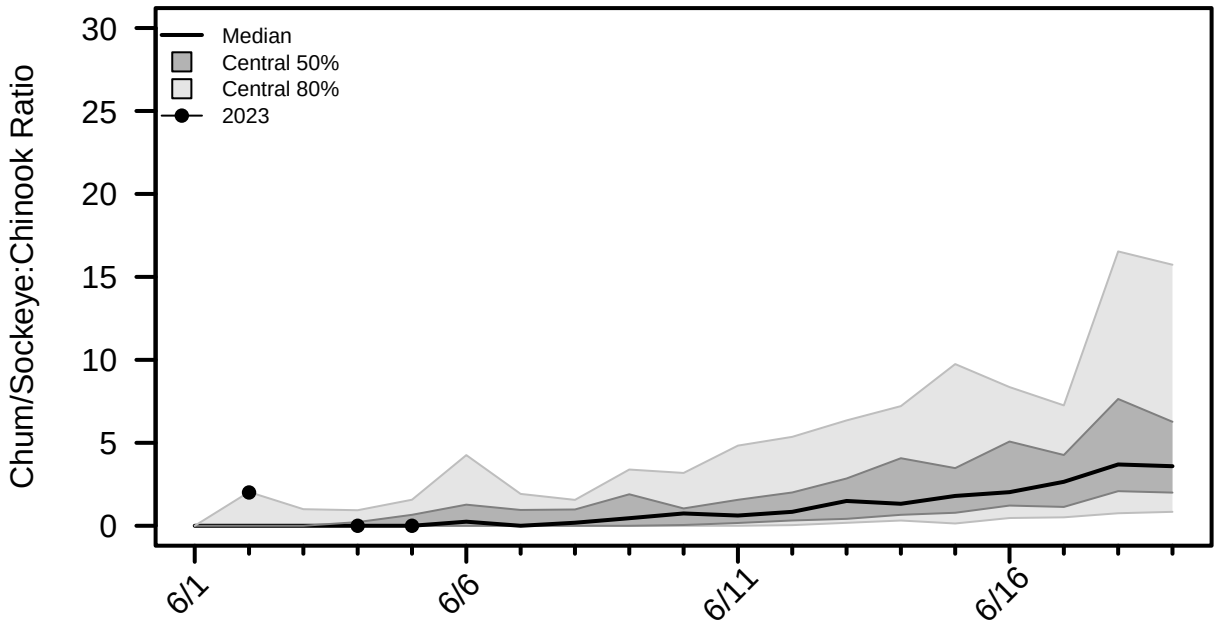
Chum/Sockeye:Chinook Salmon Ratio

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 BTF	BTF Median	BTF Lower 10%	BTF Upper 10%	2023 ATF
6/2	2.01	0	0	2.04	–
6/3	–	0	0	1	–
6/4	0	0	0	0.94	–
6/5	**0**	**0**	**0**	**1.57**	–
6/6		0.25	0	4.26	
6/7		0	0	1.92	
6/8		0.18	0	1.56	

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
6/2	8%	3%	3%	0%	0%
6/3	10%	3%	3%	0%	0%
6/4	13%	3%	3%	0%	0%
6/5	**26%**	**8%**	**3%**	**0%**	**0%**
6/6	38%	15%	8%	0%	0%
6/7	46%	18%	8%	0%	0%
6/8	51%	21%	8%	0%	0%

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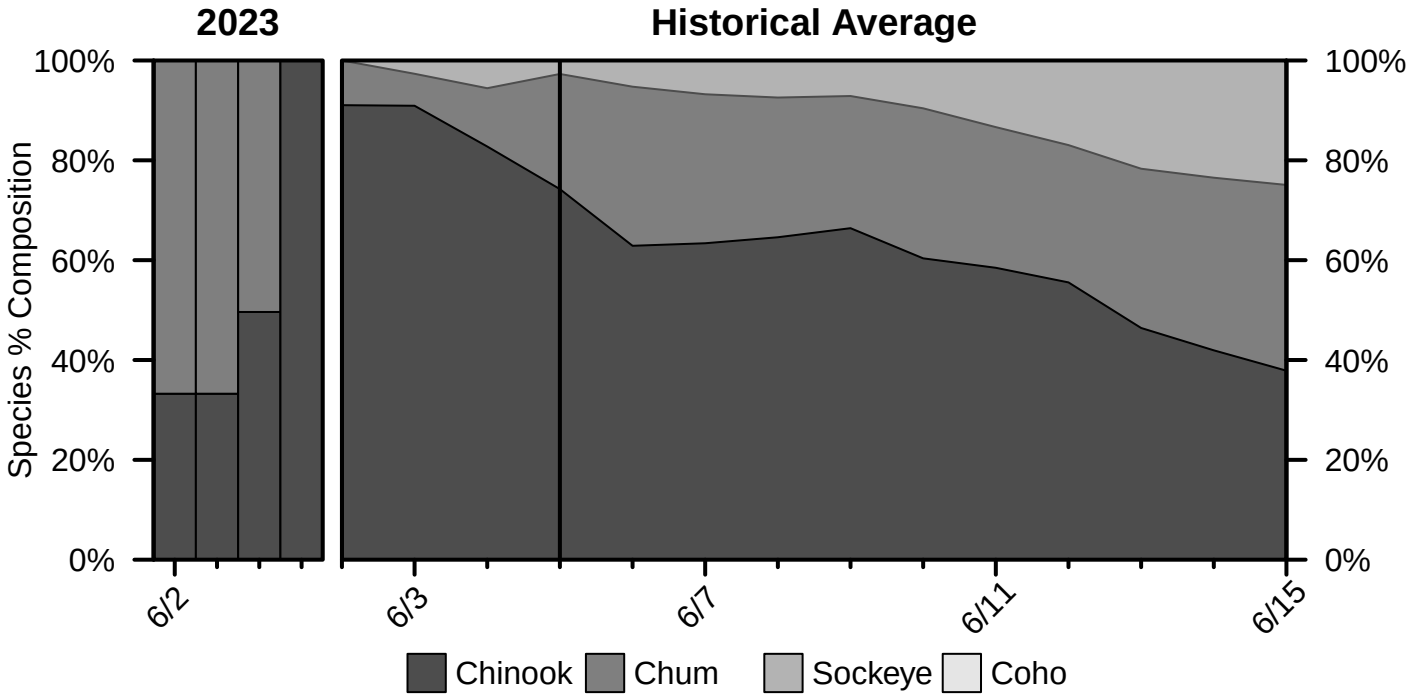
Percent Composition by Salmon Species

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

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
6/2	1	2	2	2	4	3	5
6/3	1	2	2	2	13	5	8
6/4	3	5	7	3	16	8	13
6/5	**7**	**5**	**8**	**3**	**25**	**11**	**18**
6/6		8	11	14	38	17	23
6/7		15	14	23	45	23	30
6/8		17	19	30	72	32	38
EOS		504	532	487	848	608	562

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
6/2	0	0	0	0	0
6/3	0	0	0	0	0
6/4	0	0	0	0	0
6/5	**0**	**0**	**0**	**0**	**15**
6/6		0	0	0	21
6/7		0	0	0	21
6/8		0	0	0	27
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	6/5 Cumulative %
Earliest	6/14	10%
Early 10%	6/18	6%
Early 25%	6/21	3%
Median	6/22	1%
Late 25%	6/25	<1%
Late 10%	6/26	<1%
Latest	7/3	<1%

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Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
6/2	3	0	0	0	0	1	1
6/3	3	0	0	0	0	1	1
6/4	3	0	0	0	0	1	2
6/5	**3**	**0**	**0**	**0**	**0**	**1**	**2**
6/6		0	0	3	0	2	3
6/7		0	0	6	0	3	5
6/8		0	0	8	0	5	8
EOS		2,193	327	1,442	6,427	3,720	5,590

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
6/2	0	0	0	0	0
6/3	0	0	0	0	0
6/4	0	0	0	0	0
6/5	**0**	**0**	**0**	**0**	**0**
6/6		0	0	0	0
6/7		0	0	0	0
6/8		0	0	0	0
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	6/5 Cumulative %
Earliest	6/23	<1%
Early 10%	7/1	<1%
Early 25%	7/3	<1%
Median	7/6	<1%
Late 25%	7/9	<1%
Late 10%	7/11	<1%
Latest	7/16	<1%

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