

# 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: 07/12/2023

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:

Upriver Elder:  
Downriver Elder:  
Commercial Fisher:  
Lower River Subsistence:  
Middle River Subsistence:  
Upper River Subsistence:  
Headwaters Subsistence:

### QUORUM MET? Yes / No

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
- CBM 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:
- Sport Fish Report:
- Intercept Fishery Report:
- Discussion of ADF&G Management considerations and discussion of possible alternatives (recommendations from the Working Group):
- Motion for Discussion and Action:

**OLD BUSINESS:** • **Recruitment for vacant positions.**

### 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](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**



# ORUTSARARMIUT NATIVE COUNCIL

## NATURAL RESOURCES FISHERIES PROGRAM

Weekly Report: July 12, 2023

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### **Fisheries Program Updates**

ONC Fisheries has concluded their season the first week of July, as fish camps and fisherman are getting done fishing for Chinook, Sockeye, and Chum. Feed back from many fishermen this year that it was a good fishing year and they are satisfied with their catches. They also are going to wait for Coho's to arrive, since it is now "Berry Season." Many families are headed out to check or go to berry camp for the Salmon Berry season.

ONC is in the process of crunching our final numbers as we are wrapping up our final data. We should have this data available at the next working group meeting.

Our ONC crew has shifted from fisheries to Science & Culture Camp as this is the first week of two that this will be happening.

ONC has conducted our first Aerial Net Survey for the 7/11/2023 opener. We will have those results ready to presented at the next meeting.

### **Harvest Goals**

We are still conducting our final harvest goals. As families are wrapping up their fishing season. Since, families were still unsure about how to answer our questions. We are waiting until this next opener to do a full final phone out reach. From talking to families who are close with the ONC program, majority of the families have concluded their fishing and are going to be waiting until the Coho season.

There are families who are choosing to go out fishing these next openers to help provide salmon to their relatives on the Yukon, who have no fish.

There are also families that are providing for their family and friends who live outside of the federal jurisdiction, such as: Anchorage, Fairbanks, Wasilla, and Juneau. One family said that they're shipping out fish to their families who live in the lower 48. So, they can too have a taste of fresh sockeye salmon.

### **Survey Efforts**

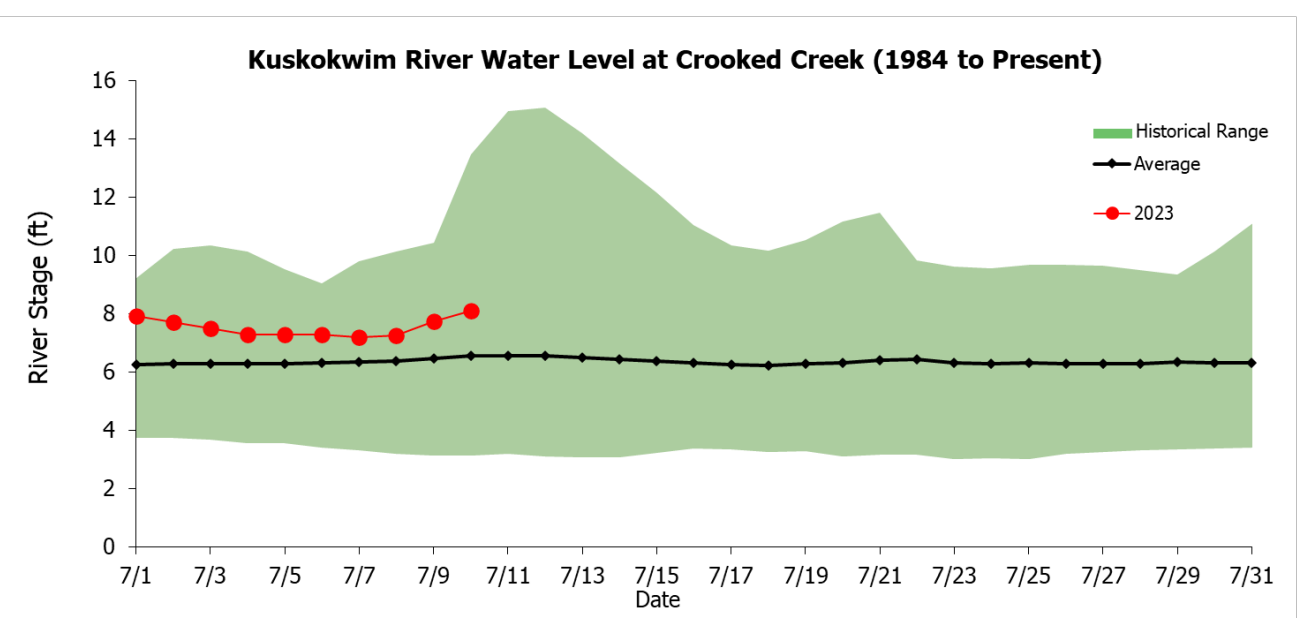
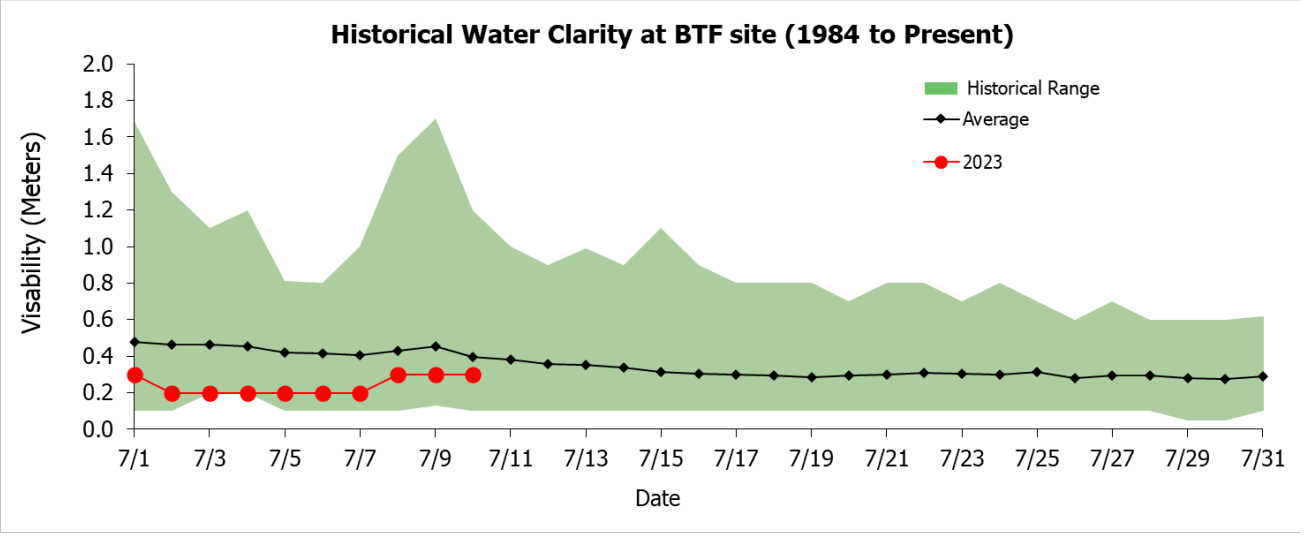
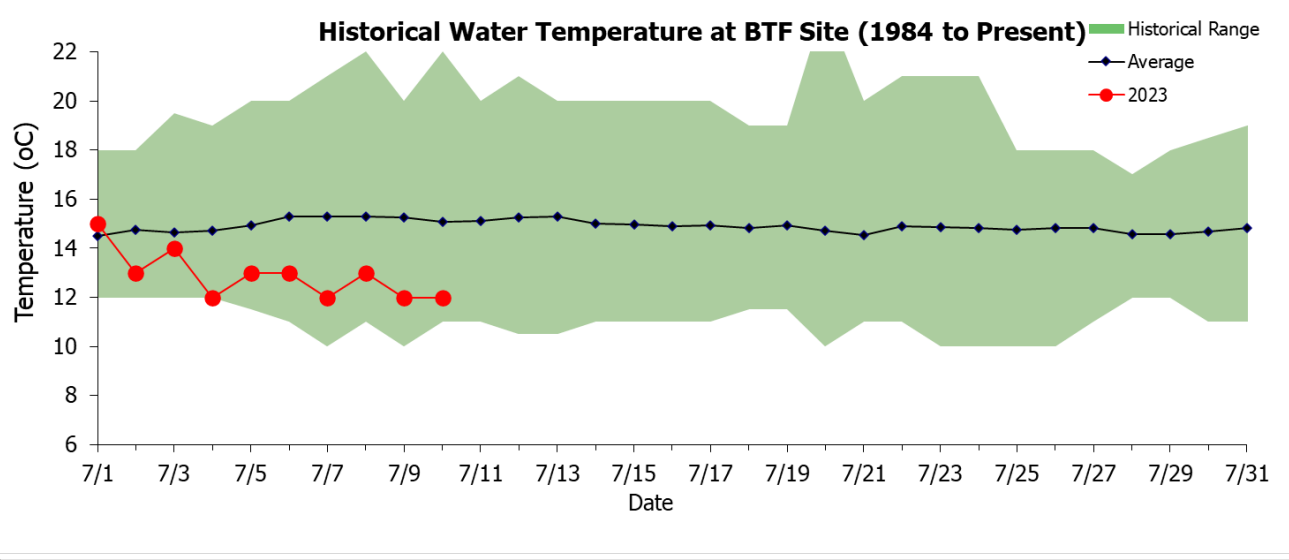
There were no surveys that were conducted this past week, as our season has wrapped up. We will be getting final survey data, which is asking if families have reached their goals or are meeting their needs.

This year has been a phenomenal and very successful season. ONC would like to thank our fisheries Technicians who put hard work, dedication, and created a very close bond with each other. This crew will be missed as they all head off to College this fall.

### **Fish Distribution**

ONC has conclude fish distribution, but we do have a couple villages that we are helping to get fish sent out.

For more information regarding the times of ADFG Fish Bin, please contact ADFG @ 543-2433.



# Kuskokwim River Salmon Assessment Update

## 7/10/2023

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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](mailto:spencer_rearden@fws.gov)) or Sean Larson (ADF&G; [sean.larson@alaska.gov](mailto: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>

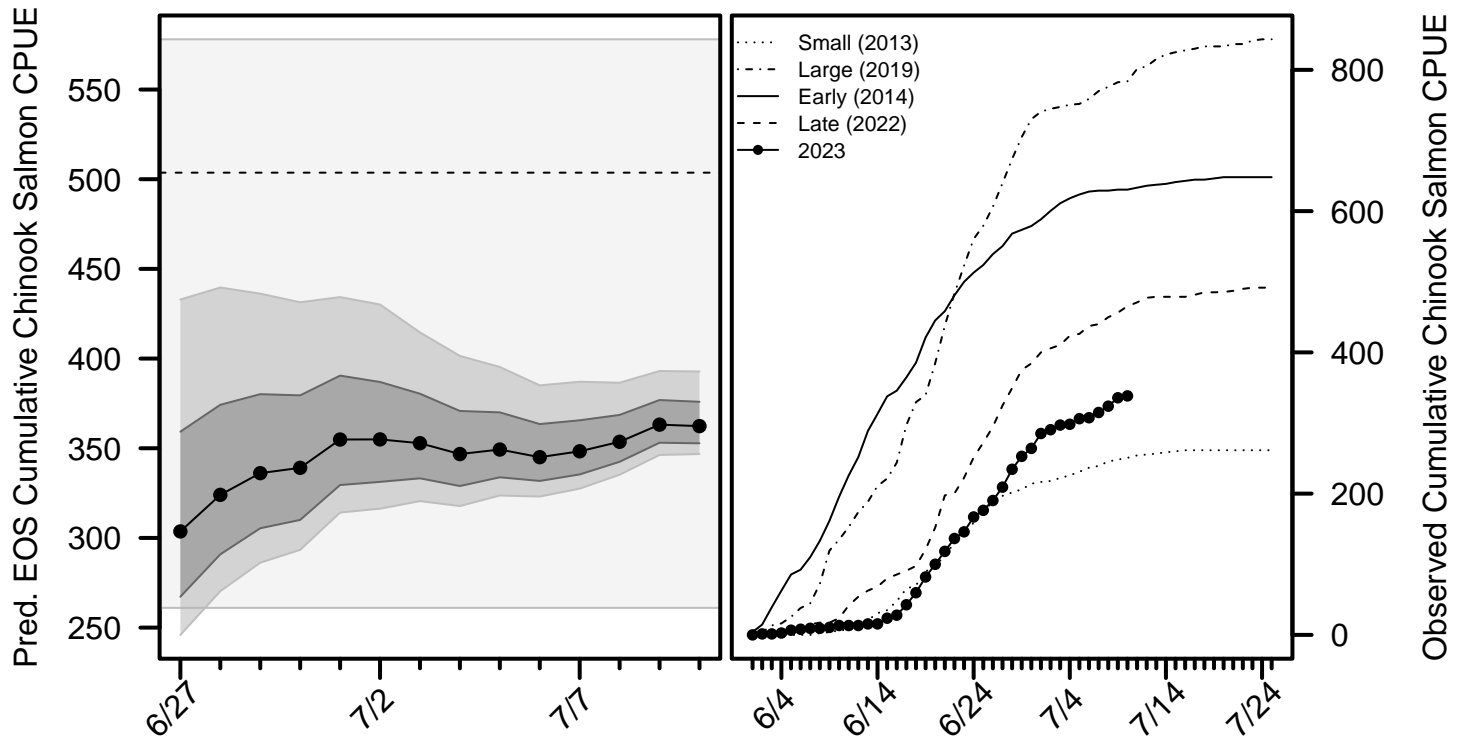
For the most up-to-date information regarding fishing opportunities please visit:

- USFWS: [https://www.fws.gov/refuge/yukon\\_delta/wildlife\\_and\\_habitat/dailyupdate.html](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 (7/10)

- The BTF daily CPUE was **3**.
- The BTF cumulative CPUE is now **338**.
- **14%** years since 2008 fell below this cumulative CPUE on this date.
- **93%** of the run is complete based on historical average run timing.
- **90% - 96%** of the run is complete based the central 50% of all historical run timing scenarios.
- **2% - 4%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **4%** of the BTF catches, compared to **4%** on average.

**Chinook Salmon Figure 1.** *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (light grey band), central 50% (dark grey band), and the historical median (circles). The grey box shows the range of EOS values from 2010 - 2013, which indexed run sizes past Bethel ranging from 60,000 to 82,000. The dashed horizontal line shows the EOS value from 2022. *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.



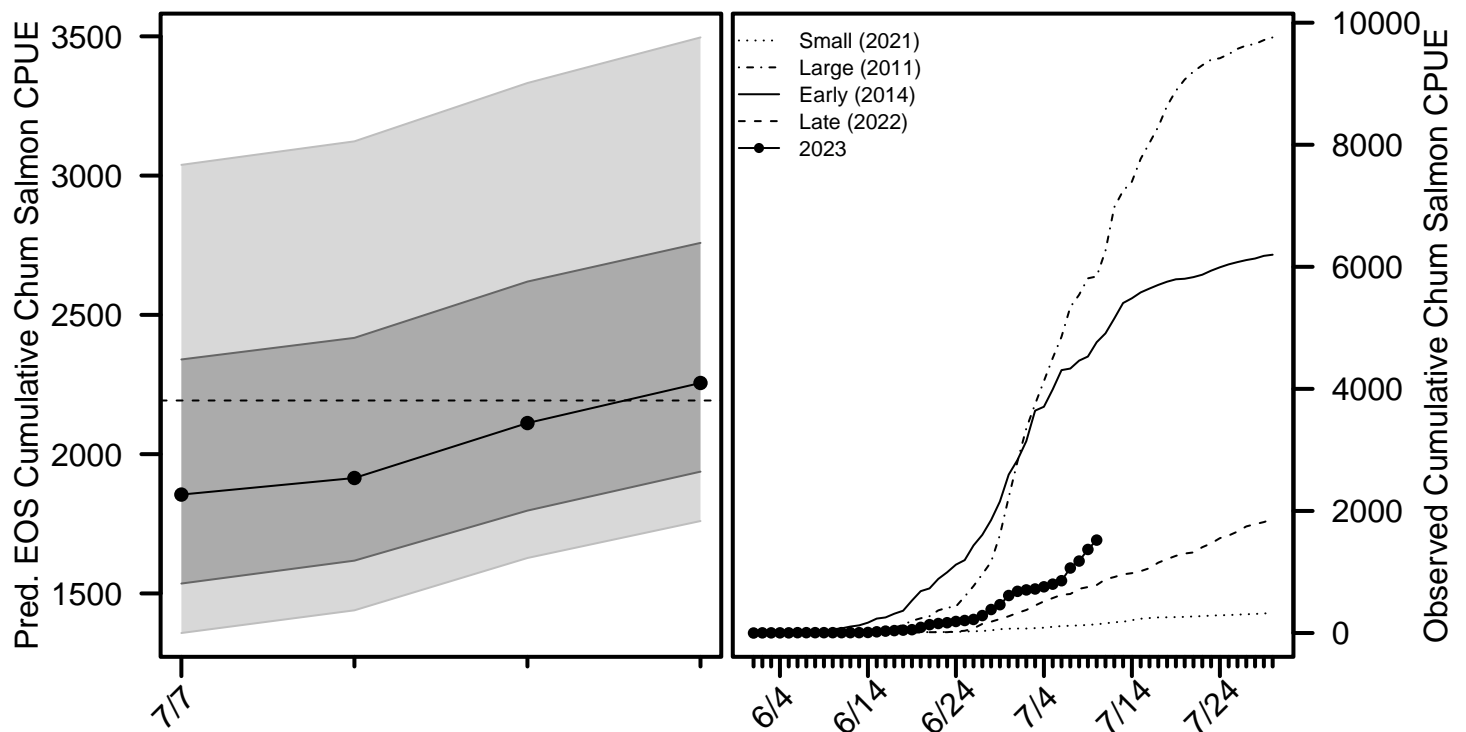
For more detailed information, see the [Chinook salmon appendix](#) at the end of this document.

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# Chum Salmon BTF Summary (7/10)

- The BTF daily CPUE was **153**.
- The BTF cumulative CPUE is now **1,522**.
- **29%** years since 2008 fell below this cumulative CPUE on this date.
- **67%** of the run is complete based on historical average run timing.
- **55% - 78%** of the run is complete based the central 50% of all historical run timing scenarios.
- **9% - 15%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **71%** of the BTF catches, compared to **72%** on average.

**Chum Salmon Figure 1.** *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (light grey band), central 50% (dark grey band), and the historical median (circles). The dashed horizontal line shows the EOS value from 2022. *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.



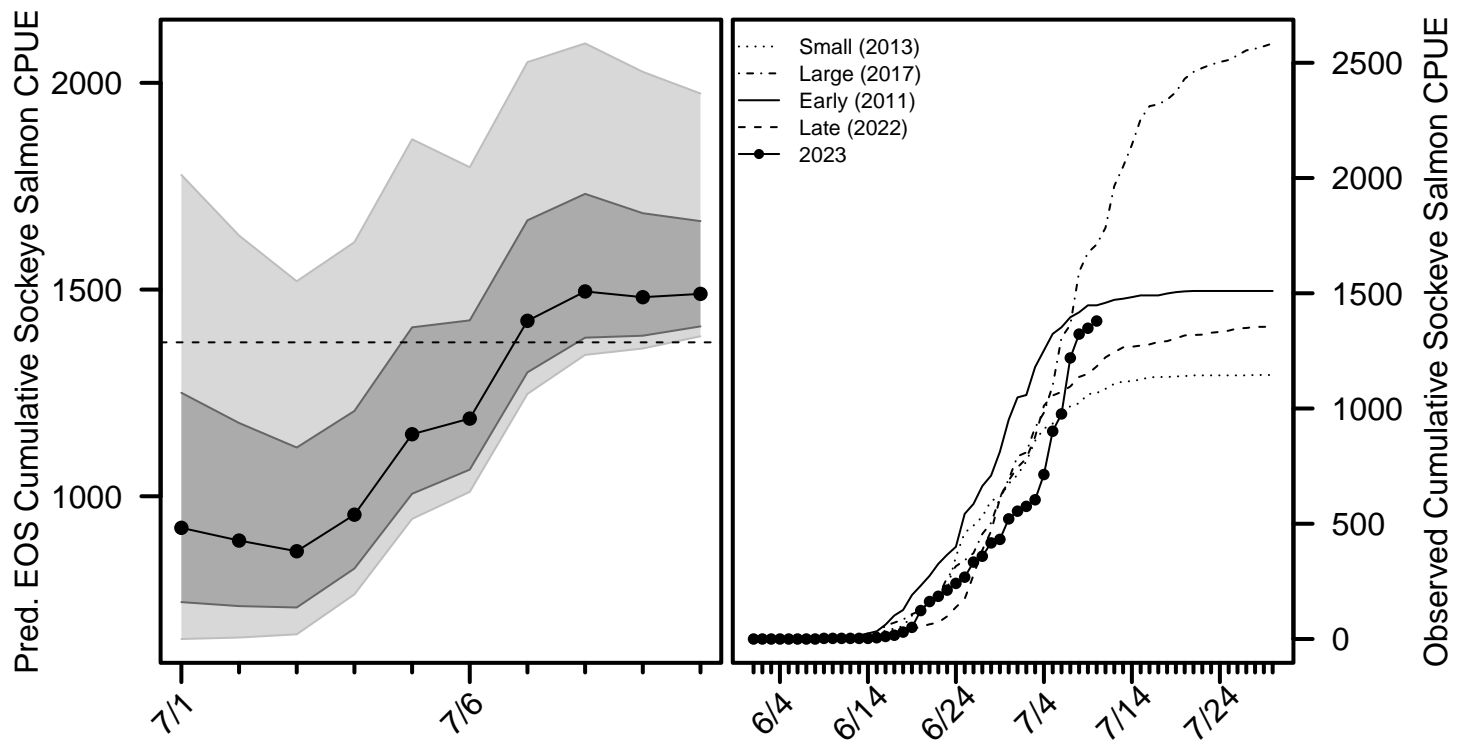
For more detailed information, see the [chum salmon appendix](#) at the end of this document.

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## Sockeye Salmon BTF Summary (7/10)

- The BTF daily CPUE was **31**.
- The BTF cumulative CPUE is now **1,379**.
- **57%** years since 2008 fell below this cumulative CPUE on this date.
- **93%** of the run is complete based on historical average run timing.
- **83% - 98%** of the run is complete based on the central 50% of all historical run timing scenarios.
- **2% - 9%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up **25%** of the BTF catches, compared to **24%** on average.

**Sockeye Salmon Figure 1.** *Left:* predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (light grey band), central 50% (dark grey band), and the historical median (circles). The dashed horizontal line shows the EOS value from 2022. *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.

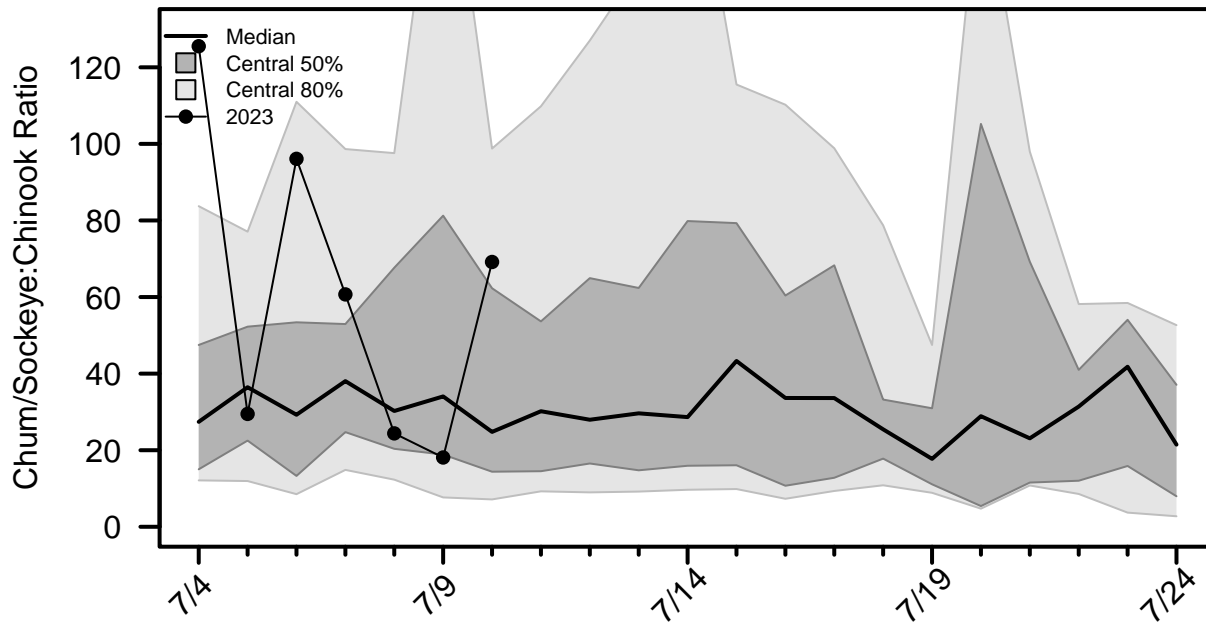
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# Chum/Sockeye:Chinook Salmon Ratio

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
7/7	60.69	38.04	14.86	98.64	3.21
7/8	24.39	30.24	12.31	97.59	3.17
7/9	18.1	34.04	7.67	192.6	5.41
7/10	<b>69.16</b>	<b>24.78</b>	<b>7.15</b>	<b>98.78</b>	<b>16.86</b>
7/11		30.18	9.26	109.8	
7/12		27.95	8.99	127	
7/13		29.63	9.2	145.8	

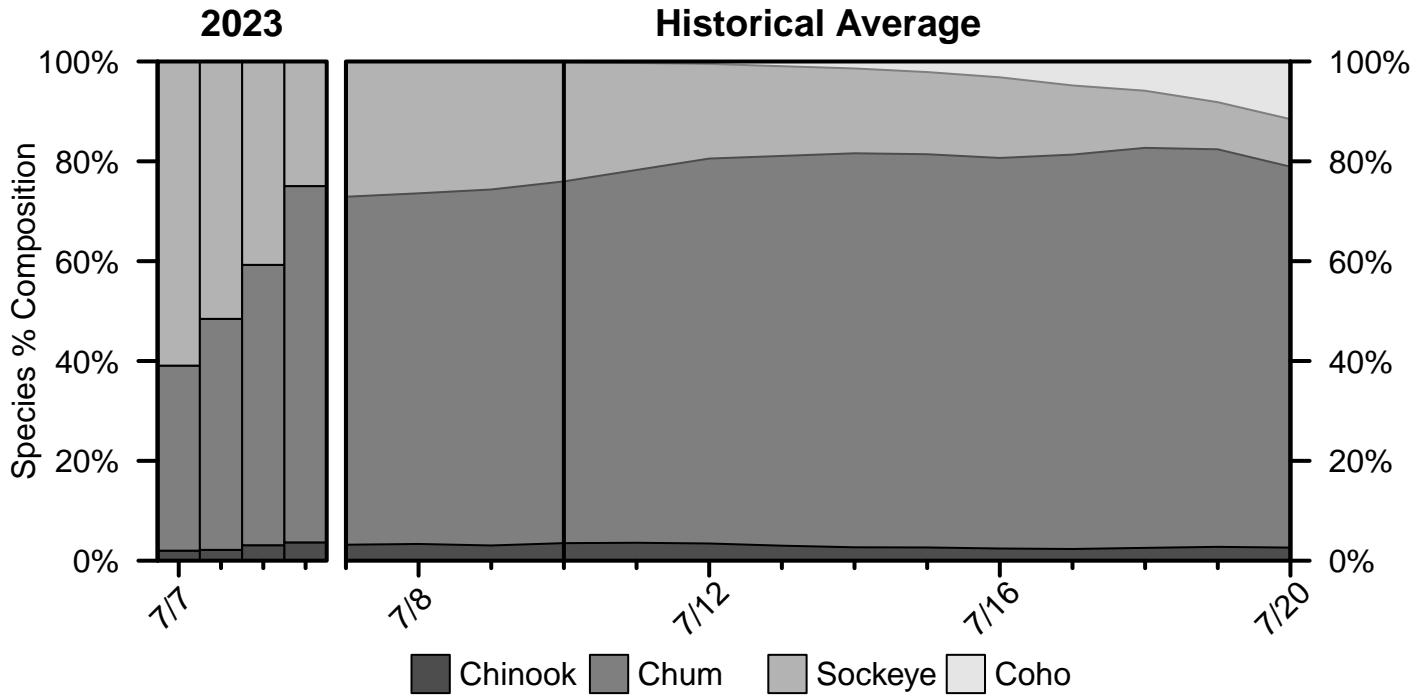
**Ratio Table 2.** The percent of previous years in which a given species ratio was exceeded at least once before a certain day in the BTF.

Date	Ratio > 1	Ratio > 3	Ratio > 5	Ratio > 10	Ratio > 20
7/7	100%	100%	100%	100%	97%
7/8	100%	100%	100%	100%	100%
7/9	100%	100%	100%	100%	100%
7/10	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
7/11	100%	100%	100%	100%	100%
7/12	100%	100%	100%	100%	100%
7/13	100%	100%	100%	100%	100%

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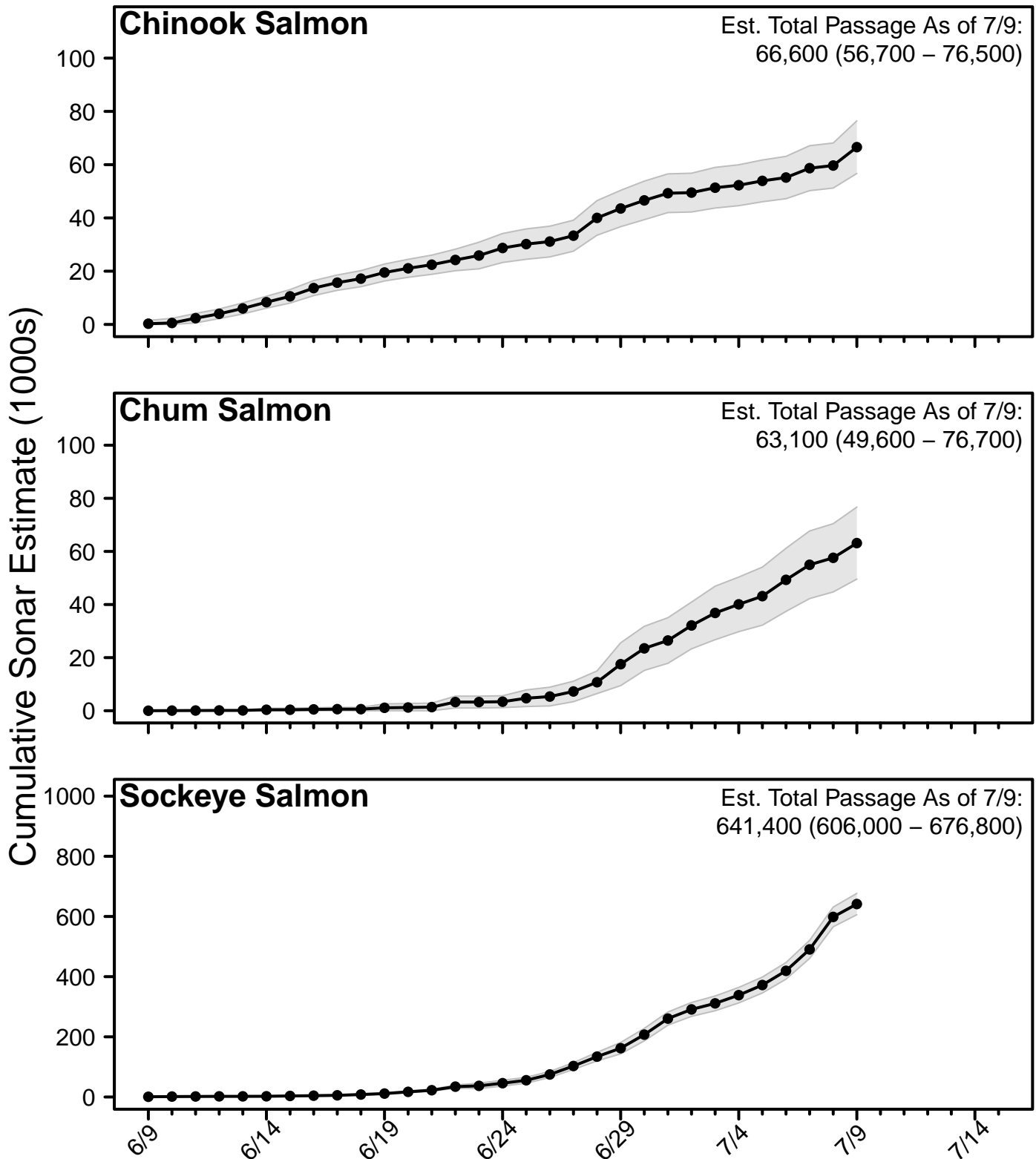
# Percent Composition by Salmon Species

**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.



# Sonar Passage Estimates

**Sonar Figure 1.** Cumulative estimates of salmon passage from the 2023 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day. Historical sonar passage estimates can be accessed at <https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>.



## In-Season Harvest Estimates

In-season harvest estimates are produced by combining counts of total fishing effort (usually obtained via aerial survey) and on-the-ground fisher interview information using statistically-rigorous methodology. The data collection efforts to produce these estimates is a highly collaborative effort, involving staff from ADF&G, KRITFC, ONC, and USFWS. Much more detailed information can be found on the YDNWR website ([https://www.fws.gov/refuge/yukon\\_delta/wildlife\\_and\\_habitat/dailyupdate.html](https://www.fws.gov/refuge/yukon_delta/wildlife_and_habitat/dailyupdate.html)).

In the tables below, CV stands for coefficient of variation, which is a commonly-used measure of uncertainty in the estimate (larger CV values are more uncertain).

**Harvest Table 1.** Estimated total Chinook salmon harvest within the YDNWR, excluding the section between Akiak and Aniak.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
<b>6/3</b>	380	380	0.3	0.3
<b>6/6</b>	220	600	0.17	0.2
<b>6/9</b>	1,060	1,660	0.21	0.15
<b>6/12</b>	1,000	2,660	0.1	0.1
<b>6/17</b>	10,440	13,100	0.08	0.07
<b>6/23</b>	6,950	20,050	0.09	0.05
<b>6/30</b>	590	20,640	0.12	0.05
<b>7/4</b>	120	20,760	0.35	0.05

**Harvest Table 2.** Estimated total chum salmon harvest within the YDNWR, excluding the section between Akiak and Aniak.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
<b>6/3</b>	0	0	0	0
<b>6/6</b>	0	0	0	NA
<b>6/9</b>	20	20	0.29	0.29
<b>6/12</b>	110	130	0.17	0.15
<b>6/17</b>	2,960	3,090	0.13	0.12
<b>6/23</b>	4,650	7,740	0.08	0.07
<b>6/30</b>	1,300	9,040	0.14	0.06
<b>7/4</b>	280	9,320	0.26	0.06

**Harvest Table 3.** Estimated total sockeye salmon harvest within the YDNWR, excluding the section between Akiak and Aniak.

Date	Daily Harvest	Cumulative Harvest	Daily CV	Cumulative CV
<b>6/3</b>	0	0	0	0
<b>6/6</b>	0	0	0	NA
<b>6/9</b>	120	120	0.21	0.21
<b>6/12</b>	410	530	0.17	0.14
<b>6/17</b>	6,160	6,690	0.15	0.14
<b>6/23</b>	9,540	16,230	0.07	0.07
<b>6/30</b>	6,450	22,690	0.25	0.09
<b>7/4</b>	1,230	23,920	0.2	0.08

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# Chinook Salmon Appendix

**Chinook Salmon Table A1.** Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
<b>7/7</b>	315	440	444	389	770	528	497
<b>7/8</b>	324	450	455	407	776	538	505
<b>7/9</b>	336	456	465	415	782	545	511
<b>7/10</b>	<b>338</b>	<b>465</b>	<b>476</b>	<b>420</b>	<b>784</b>	<b>553</b>	<b>516</b>
<b>7/11</b>		471	492	434	801	564	523
<b>7/12</b>		477	500	445	805	571	528
<b>7/13</b>		479	505	448	815	575	532
<b>EOS</b>		504	532	487	848	608	562

**Chinook Salmon Table A2.** Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
<b>7/7</b>	630	1,157	1,630	1,463	1,691
<b>7/8</b>	654	1,265	1,683	1,576	1,691
<b>7/9</b>	684	1,270	1,835	1,729	1,691
<b>7/10</b>	<b>693</b>	<b>1,270</b>	<b>1,863</b>	<b>1,780</b>	<b>1,691</b>
<b>7/11</b>		1,277	1,863	1,796	1,691
<b>7/12</b>		1,277	1,879	1,796	1,691
<b>7/13</b>		1,277	1,891	1,831	1,691
<b>EOS</b>		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	7/10 Cumulative %
<b>Earliest</b>	6/14	99%
<b>Early 10%</b>	6/18	97%
<b>Early 25%</b>	6/21	96%
<b>Median</b>	6/22	93%
<b>Late 25%</b>	6/25	90%
<b>Late 10%</b>	6/26	86%
<b>Latest</b>	7/3	82%

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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.
<b>7/7</b>	1,065	639	119	628	1,940	1,215	2,676
<b>7/8</b>	1,179	724	124	692	2,018	1,366	2,869
<b>7/9</b>	1,369	753	132	730	2,157	1,542	3,088
<b>7/10</b>	<b>1,522</b>	<b>786</b>	<b>143</b>	<b>762</b>	<b>2,188</b>	<b>1,674</b>	<b>3,277</b>
<b>7/11</b>		881	159	818	2,421	1,827	3,475
<b>7/12</b>		917	176	903	2,707	2,046	3,677
<b>7/13</b>		961	184	930	2,761	2,143	3,826
<b>EOS</b>		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
<b>7/7</b>	496	526	160	1,304	1,051
<b>7/8</b>	568	639	194	1,501	1,051
<b>7/9</b>	717	766	239	1,725	1,051
<b>7/10</b>	<b>803</b>	<b>926</b>	<b>239</b>	<b>1,853</b>	<b>1,051</b>
<b>7/11</b>		945	239	1,995	1,051
<b>7/12</b>		952	255	2,073	1,051
<b>7/13</b>		952	267	2,291	1,051
<b>EOS</b>		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	7/10 Cumulative %
<b>Earliest</b>	6/23	92%
<b>Early 10%</b>	7/1	86%
<b>Early 25%</b>	7/3	79%
<b>Median</b>	7/6	68%
<b>Late 25%</b>	7/9	56%
<b>Late 10%</b>	7/11	44%
<b>Latest</b>	7/16	32%

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# Sockeye Salmon Appendix

**Sockeye Salmon Table A1.** Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
<b>7/7</b>	1,219	1,096	975	646	1,530	1,088	1,162
<b>7/8</b>	1,323	1,137	1,106	696	1,582	1,158	1,222
<b>7/9</b>	1,348	1,150	1,176	708	1,638	1,204	1,270
<b>7/10</b>	<b>1,379</b>	<b>1,183</b>	<b>1,228</b>	<b>745</b>	<b>1,663</b>	<b>1,249</b>	<b>1,315</b>
<b>7/11</b>		1,222	1,404	801	1,735	1,331	1,367
<b>7/12</b>		1,245	1,458	838	1,826	1,385	1,413
<b>7/13</b>		1,265	1,485	850	1,895	1,418	1,440
<b>EOS</b>		1,372	1,694	1,060	2,685	1,817	1,747

**Sockeye Salmon Table A2.** Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
<b>7/7</b>	177	102	220	94	33
<b>7/8</b>	181	102	225	100	33
<b>7/9</b>	192	108	233	100	33
<b>7/10</b>	<b>260</b>	<b>122</b>	<b>233</b>	<b>100</b>	<b>33</b>
<b>7/11</b>		129	241	105	33
<b>7/12</b>		129	241	131	33
<b>7/13</b>		129	241	155	33
<b>EOS</b>		129	241	209	33

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

Timing	Midpoint	7/10 Cumulative %
<b>Earliest</b>	6/22	100%
<b>Early 10%</b>	6/24	99%
<b>Early 25%</b>	6/27	98%
<b>Median</b>	6/29	93%
<b>Late 25%</b>	7/2	83%
<b>Late 10%</b>	7/6	70%
<b>Latest</b>	7/10	53%

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# 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**

**Sunday, July 9, 2023**

<b>South Peninsula</b>	<b>Chinook</b>	<b>Sockeye</b>	<b>Coho</b>	<b>Pink</b>	<b>Chum</b>
Post June Cold Bay	29	4,237	0	5,955	62,211
Post June Thin Point Section	0	0	0	0	0
Post June Morzhovoi Bay to South Unimak	7	4,206	568	4,642	20,079
Post June Shumagin Islands	0	7,715	91	319	1,172
Southeastern District Mainland	0	0	0	0	0
Northwest Stepovak Section (7/1-7/25)	0	0	0	0	0
Dolgoi Island Area1*	4	14,105	5	2,550	3,164
Dolgoi Island Area2	0	0	0	0	0
June Shumagin Islands	576	334,846	112	132,157	106,417
June South Unimak	1,159	539,345	22	78,718	92,320
	<b>1,775</b>	<b>904,454</b>	<b>798</b>	<b>224,341</b>	<b>285,363</b>



# Genetic Stock Composition of Chum Salmon Harvested in Commercial Salmon Fisheries of the South Alaska Peninsula

**What:** A study to estimate stock, age, and length compositions and stock-specific harvests in South Alaska Peninsula fisheries.

**Why:** Relatively large harvests of chum salmon in South Alaska Peninsula fisheries in recent years corresponding with small returns of chum salmon to Western Alaska raised concerns among stakeholders about the stock-specific harvests in South Alaska Peninsula fisheries.

**Where:** South Alaska Peninsula (see Figure 1).

**When:** 2022-2026

**2022 Results:**

- 14,869 samples of chum salmon were collected from 3 different port locations.
- 9,957 samples were selected and genotyped to represent the 2022 harvest using mixed stock analysis techniques.
- The Asia group was the largest contributor (345,896; 42.5%) to the total South Alaska Peninsula commercial chum salmon fishery, followed by East of Kodiak (137,503; 16.9%), South Peninsula (107,559; 13.2%), Coastal Western Alaska (103,798, 12.8%), and Chignik/Kodiak (72,050, 8.9%).

June Fishery Results (Table 15)

Table 15.—South Alaska Peninsula area, June 2022, all strata. Reporting group-specific stock composition and harvest estimates. Median, 90% credibility intervals, means, and SDs are reported.

Reporting group	Proportions (%)					Harvest = 544,064; 13 strata						
	Median	90% CI			Mean	SD	Median	90% CI			Mean	SD
		5%	95%	5%				95%				
Asia	58.0	56.2	59.7	58.0	1.1	315,162	302,005	329,874	315,469	8,496		
Kotzebue Sound	3.6	2.6	4.7	3.6	0.7	19,397	14,074	25,584	19,540	3,572		
CWAK	17.7	16.2	19.4	17.7	1.0	96,116	87,486	106,341	96,466	5,668		
Upper Yukon	0.3	0.1	0.6	0.3	0.2	1,392	424	3,290	1,571	903		
Northern Dist.	1.0	0.6	1.5	1.0	0.3	5,329	3,349	8,266	5,495	1,491		
Northwestern Dist.	1.6	1.1	2.3	1.6	0.4	8,749	5,904	12,435	8,919	2,045		
South Peninsula	2.2	1.4	3.3	2.3	0.6	12,102	7,581	17,793	12,336	3,094		
Chignik/Kodiak	2.1	1.4	2.9	2.1	0.5	11,294	7,449	16,023	11,456	2,595		
East of Kodiak	13.4	12.2	14.6	13.4	0.7	72,712	66,339	79,512	72,812	4,012		
Total									544,064			

Note: Harvest is the number of chum salmon reported to have been harvested in the June fisheries of the South Peninsula. Harvest total may differ from totals in experimental design table due to rounding error.

**June + Post-June Fishery Results (Table 27)**

Table 27.—South Alaska Peninsula area, 2022, all strata. Reporting group-specific stock composition and harvest estimates. Median, 90% credibility intervals, means, and SDs are reported.

Reporting group	Proportions (%)					Harvest = 814,077; 28 strata						
	Median	90% CI			Mean	SD	Median	90% CI			Mean	SD
		5%	95%	5%				95%				
Asia	42.5	41.2	43.8	42.5	0.8	345,896	332,176	360,562	346,062	8,641		
Kotzebue Sound	2.6	2.0	3.4	2.7	0.4	21,531	15,905	27,774	21,655	3,656		
CWAK	12.8	11.7	13.9	12.8	0.7	103,798	95,108	113,928	103,945	5,627		
Upper Yukon	0.2	0.1	0.4	0.2	0.1	1,522	507	3,464	1,692	912		
Northern Dist.	1.0	0.7	1.4	1.0	0.2	7,999	5,597	11,231	8,139	1,701		
Northwestern Dist.	1.8	1.4	2.3	1.8	0.3	14,487	11,033	18,636	14,596	2,296		
South Peninsula	13.2	12.0	14.4	13.2	0.7	107,559	98,140	117,513	107,613	5,965		
Chignik/Kodiak	8.9	7.9	10.0	8.9	0.7	72,050	64,090	81,259	72,289	5,415		
East of Kodiak	16.9	16.1	17.9	17.0	0.5	137,944	130,503	146,152	138,086	4,788		
<b>Total</b>									<b>814,077</b>			

Note: Harvest is the number of chum salmon reported to have been harvested in the fisheries of the South Peninsula. Harvest total may differ from totals in experimental design table due to rounding error.

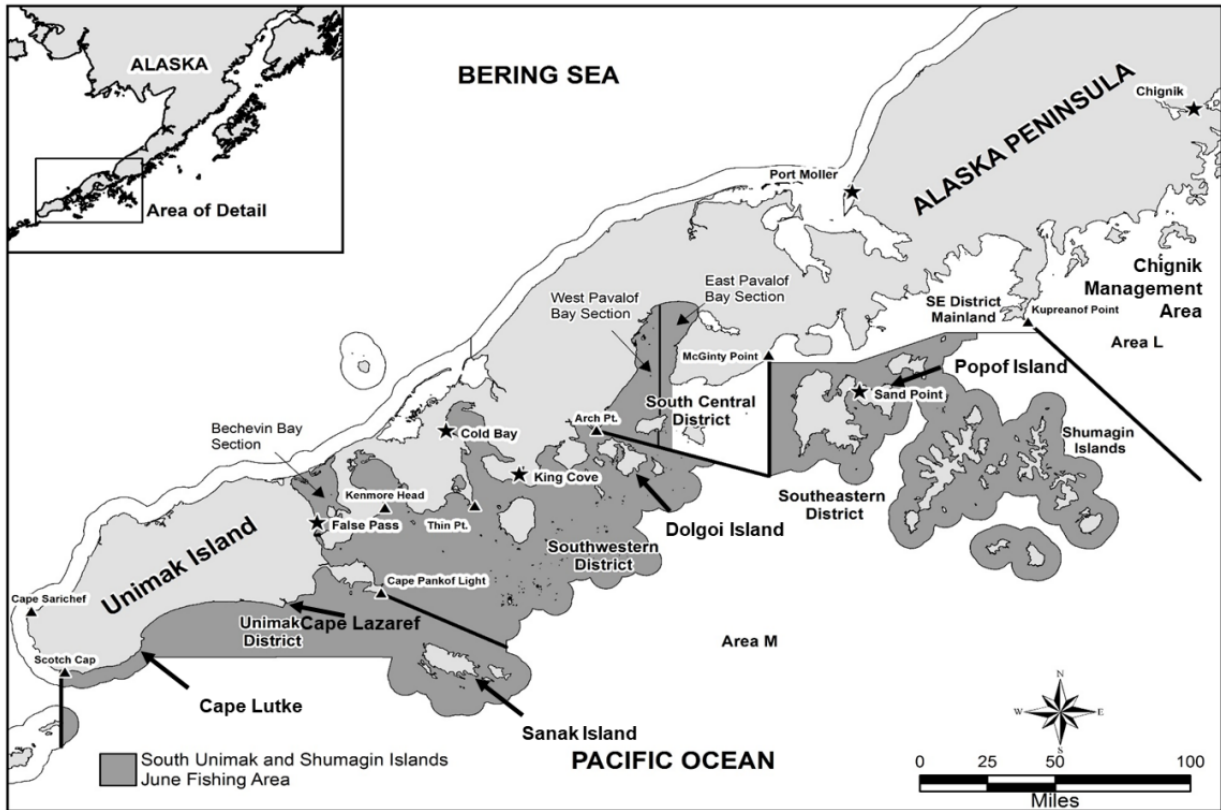
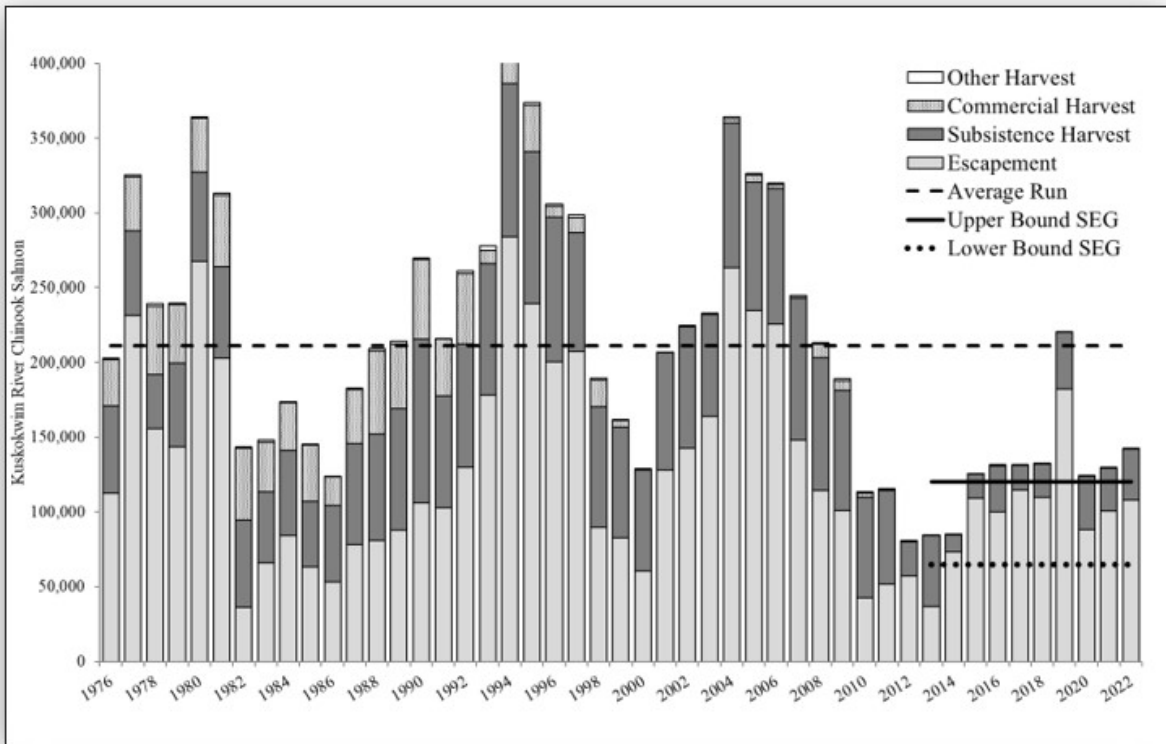


Figure 1.—Map of the South Alaska Peninsula Management area and the locations of the South Unimak and Shumagin Islands June fisheries.

**2022 Report:**

Dann, T. H., H. A. Hoyt, E. M. Lee, E. K. C. Fox, and M. B. Foster. 2023. Genetic stock composition of chum salmon harvested in commercial salmon fisheries of the South Alaska Peninsula, 2022. Alaska Department of Fish and Game, Special Publication No. 23-07, Anchorage.

<http://www.adfg.alaska.gov/FedAidPDFs/SP23-07.pdf>



## Kuskokwim River Salmon Management Working Group Membership

1. Members: The Kuskokwim River Salmon Management Working Group shall have 13 member organizations or constituencies. These members represent: Elders (Upriver, Downriver) (2), Subsistence Fishermen (Lower River, Middle River, Upriver, and Headwaters) (4), \*Processors [now a 2<sup>nd</sup> Member at Large] (1), Commercial Fishermen (1), Sport Fishers (1), Member at Large (1), Federal Subsistence Regional Advisory.

- **Elder.** Any respected Elder that resides within the Kuskokwim Area.
- **Headwaters Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from McGrath upstream to the headwaters of the Kuskokwim River.
- **Upriver Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage above Chuathbaluk and below McGrath.
- **Middle River Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from Lower Kalskag to Chuathbaluk within District W-2.
- **Lower River Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from Eek to Tuluksak within District W-1.
- **Member at Large.** Representatives that are Area residents selected by the Working Group for their knowledge of, appreciation for, and experience with Kuskokwim River fisheries.
- **2<sup>nd</sup> Member at Large.** \*This was once a seat for processors, but was changed by the working group with the decrease in commercial fishing activity.
- **Federal Regional Advisory Council.** Representatives that are current members of the Yukon Kuskokwim Delta and Western Interior Advisory Councils and reside in the Kuskokwim Area.
- **Commercial Fishermen.** Kuskokwim commercial fishing permit holder or crew member, supported by commercial fishing permit holders who fish primarily within Districts W-1 and W-2.
- **Sport Fisherman.** Representatives that actively participate in sports fishing within the Kuskokwim River drainage.
- **Alaska Department of Fish and Game.** Representatives that are presently employed with ADF&G in Bethel. This position is an associate member and may only vote on decisions not directly related to fisheries management. Final emergency order authority continues to rest with the ADF&G.

In the case where more than 1 person is nominated to represent a member organization or constituency, the Working Group will elect 1 of the nominees to represent the member organization or constituency.