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: **06/28/2023** **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
- 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=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,
Savannah Hollingworth
Working Group Coordinator

Fisheries Program Updates

This week we welcomed our new Fisheries Biologist, Jessica Reynolds, on Thursday, June 22nd– just in time for the fourth opener of the season on Friday, June 23rd. As Jessica has just arrived, we asked for her to introduce herself to those of you in our community below:

Thank you all for such a warm welcome to Bethel! It's an honor to be here on the Traditional lands of the Yup'ik peoples. I wanted to briefly introduce myself as this is my first time spending time in Bethel. I grew up in Georgia fishing with my dad on the Atlantic Ocean and the Gulf of Mexico since I was a child. My family still resides in Georgia, but I have been living in Oregon, Idaho, and Washington over the last few years attending graduate school and gaining hands-on fisheries experience. I hold a background and education in fisheries management and sociology, and I most recently have been working with NOAA's Alaska Fisheries Science Center, where I have learned a lot about the complex fisheries management and community issues and needs of Alaska fishing communities. However, as I embark on my new journey with ONC, I want to emphasize how much I still have to learn from you all in the community of Bethel.

Since arriving, I was blessed by a Greater White-fronted Goose flying overhead within ten minutes of getting my feet wet at the boat harbor surveys during the Friday opener. By mid-afternoon, I felt honored by the opportunity to visit and survey families at fish camps as they were arriving back after a long day of harvesting. I see a resilient group of peoples that are thriving despite fisheries closures and climate change. I've seen the smiles from Elders as we show up to their door with salmon. I've felt the excitement from families as they get the opportunity to fish during the closures, as one man joked at a fish camp, "no laughing, this is serious business," as he chuckled with a wink.

If you see me around, please do not hesitate to introduce yourself and say hello. I look forward to meeting you and your families, and I truly want to hear from YOU!

Technical Issues

ONC is upgrading our network and internet services to another provider. We should be up and running at full capacity by the end of the week.

Harvest Goals

During this week's opener, we began asking families at fish camps and at the boat harbor if they have met their harvest goals. Approximately 10-15 families reported that they are happy and satisfied with the-amount of fish they have already been fortunate enough to harvest this season, as this last opener has allowed them to reach their families' goals. Simultaneously, many families suggested they would be thrilled to catch just as much as they have this season, putting them at their mid-goals for the season. Only one fish camp that we spoke with seemed to be unhappy with current management and felt that they wanted significantly more fish- "a million fish," they said when asked about their goals. These different responses to harvest goals reflect the diversity of perspectives that make up our fishing community, as each camp has a different number of families that depend upon these camps, and each family has been affected by salmon declines over past years differently.

Survey Efforts

As of June 25, 2023, we have completed 192 Surveys this last opener. Sixty one fish camps have been surveyed this year and thirty-nine fish camps were visited on Friday, June 23 through Saturday, June 24. Of the families that were visited over the past opener, all fish camps were actively fishing and processing their fresh catches. The fishing trip data was collected from fishers at fish camp and over the phone. Due to the shallow waters and difficulty reaching fishamps, we made more phone calls to get fish camp data.

Table 1. Broken down average percentage and overall total salmon harvest reports from the Bethel Area Fish Camps & Boat Harbor Surveys on June 23, 2023 fishing opener

Surveys broken down by type	**Number of Surveys Conducted**	**Average Chinook Harvest**	**Average Chum Harvest**	**Average Sockeye Harvest**	**Average Other Harvest**
Fish Camps	39	32%	18%	49%	0%
Boat Harbor	154	30%	24%	45%	1%
Total Overall Harvest Numbers Fish Camps & Boat Harbor	**Total Surveys Conducted**	**Total Chinook Harvest**	**Total Chum Harvest**	**Total Sockeye Harvest**	**Total Other Harvest**
	192	1403	1039	2148	45

Fish Camp Comments:

The overall fish camp status is that fish are drying, some are starting to smoke their first round of salmon. Many folks already have full fish racks and are not needing any fish at this time. Since, they fished hard on the prior opener Jun 17, 2023. Many families were going out to get more dry fish targeting Reds and Chums. There are some families who are still struggling to harvest any salmon at all, because fishing this year isn't as lucky for them. There are some families who are following traditional Yupik teachings, when it comes to the loss of close family members and opt out of fishing this year. One family reported that they waited until the Chinook Run was mainly passed before starting their fishing season. That they wanted to only target Reds and Chums, because they were concerned about the Chinook Salmon population being so drastically low.

One family reported that they were upset that those upriver were allowed to fish 24/7. "It's not fair, " they stated. "We feel like children with all these rules, these regulations," they said. They reported feeling like foreigners on their own land as a result of fisheries management decisions made along the Kuskokwim River.

One family reported that they would like the opportunity to have one more opener or even half an opener.

Another family reported that they would like to have the chance to set more set nets this season.

Boat Harbor Comments:
This past opener our observations of the Bethel Boat Harbor and number of fisherman, was far less in comparison to the previous opener on Jun 17, 2023. There wasn't as much traffic going through the boat harbor and the parking lots weren't jam packed. Overall there was a significant increase in fishing effort as folks were coming back sooner and with more fish than the prior opener.

There were not very many comments that were given to the fishery technicians at the boat harbor from fishermen. Most families did mention that it was a good day for fishing. Majority of the feed back that we were getting was that there were more Reds and Chums than King Salmon. A couple fisherman reported that the Chum population was significantly higher than previous years and that the Chum were looking really nice. One fisherman commented that they had caught more Chum Salmon than the past six years and the numbers were very high. One person said they should have gone upriver to chase the King Salmon. One fisherman was very vocal in support of closing down Area M fishery, in support of the Senate Bill.

Table 2. Average subsistence user data by surveyed individuals at the Bethel harbor and fish camps from the June 23rd set/ drift net fishing opener

Total Overall Surveys	Type of Net	Harvest Stratum	Total Surveys by Stratum	Average Start Time	Average End Time	Average Soak Time	Average Mesh Size	Average Net Length
187	Drift	Stratum A	17	08:28	16:40	230.29	5.8	230
		Stratum B	33	09:40	15:58	197.21	5.91	139.7
		Stratum C	134	09:34	15:43	223.77	5.86	133.19
		Stratum D1	1	07:00	16:03	300	6	150
		Stratum D2	1	11:45	20:10	80	6	80
		Stratum O	1	11:00	18:00	80	6	80

5	**Set**	**Stratum C**	5	10:36	18:24	515	5.83	55

Fish Distribution

ONC delivered to over 100 Bethel Families this week. We are working with other villages to coordinate shipping fish out to communities, especially the Tundra Villages of Atmautluak, Kasigluk, and Nunapitchuk. We are also looking into contacting Lower Yukon Villages, but the logistics are a little hard at the moment.

Many families reported being so thankful and so blessed to receive fish. One family who was unable to fish because they did not own a boat said, “this will feed us through the winter.” One family reported not having any fish for three years now and had trouble finding words to express their gratitude. One elder expressed their gratitude stating they had not been fishing since their husband passed.

Kuskokwim River In-season Harvest and Effort Estimates

6/23/2023 Subsistence Harvest Opportunity (Drift & Set Nets)

Opportunity Time Period: 7:00 AM – 7:00 PM (12 Hours)

Area Covered by Estimates: Tuntutuliak ⟷ Bogus Cr.

Data Sources

TABLE 1. The number and percent of fisher interviews conducted by location and organization.

Data Source	Interviews	Percent
Bethel Boat Harbor (ONC)	143	54%
Other Villages (KRITFC)	86	32%
Bethel Area Fish Camps (ONC)	38	14%
Total	**267**	**100%**

Of these interviews, **258** were from drift nets and **9** were from set nets.

TABLE 2. The time each flight was conducted and fishers counted each flight.

Time Information			Nets Counted	
Start Time	End Time	Hours	Drift	Set
10:15 AM	12:10 PM	1.92	371	27
4:11 PM	5:50 PM	1.65	229	10

Effort Estimates

- An estimated **449** drift boat trips occurred.
  - An estimated **74%** of the trips counted on flight 2 were also counted on flight 1.
  - An estimated **18** trips started and ended when no flights occurred.
- An estimated **33** set net trips occurred.

Harvest Estimates

- An estimated total of **21,175 (18,656 – 23,978)** salmon were harvested.
  - An estimated total of **6,949 (5,871 – 8,121)** Chinook salmon were harvested.
  - An estimated total of **4,647 (3,915 – 5,428)** chum salmon were harvested.
  - An estimated total of **38 (12 – 73)** coho salmon were harvested.
  - An estimated total of **9,541 (8,274 – 10,943)** sockeye salmon were harvested.
- Harvest by set nets accounted for an estimated **897 (296 – 1,728)** total salmon (**17%** Chinook salmon, **7%** chum salmon, **0%** coho salmon, and **76%** sockeye salmon).

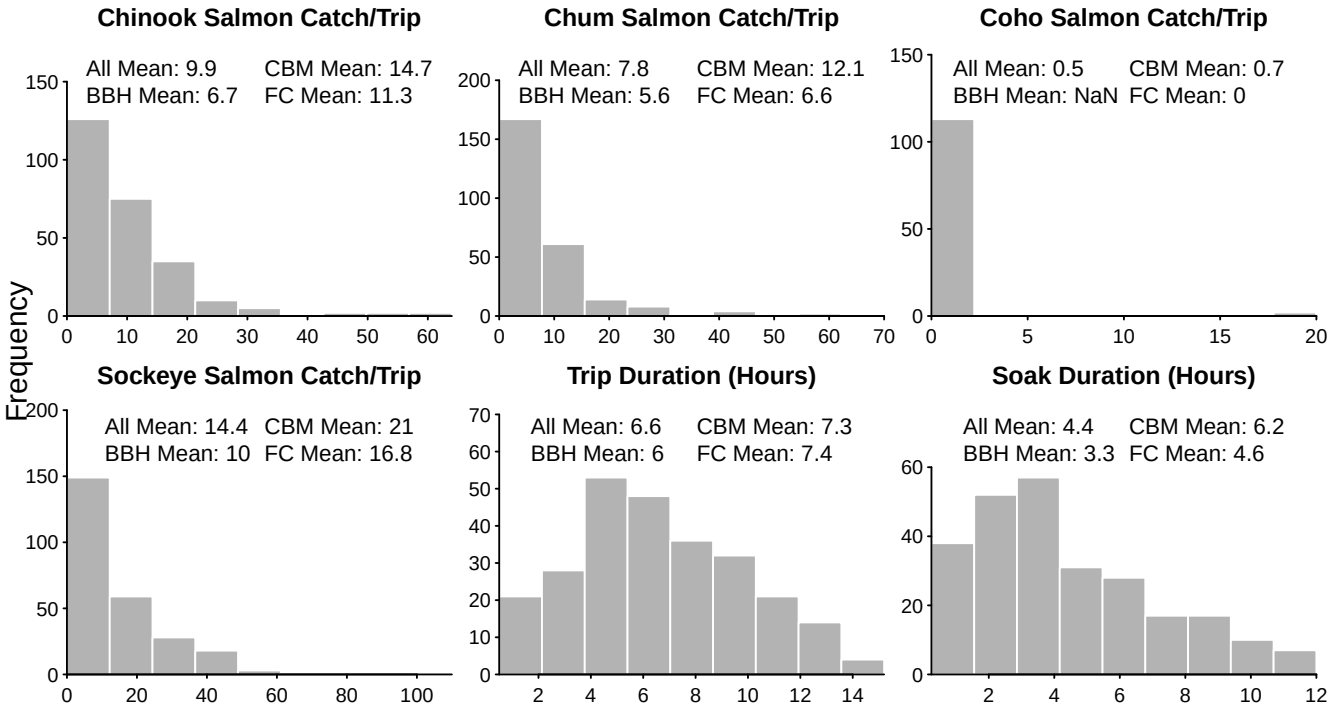
TABLE 3. Summaries by river stratum (area) for drift nets. Numbers in parentheses are 95% confidence intervals.

			Estimated Harvest				
Stratum	**Interviews**	**Effort Est.**	**Chinook**	**Chum**	**Coho**	**Sockeye**	**Total**
Tuntutuliak ⟷ Johnson R.	18	78	2,479 (1,600 – 3,550)	1,151 (786 – 1,625)	0 (0 – 0)	1,622 (1,094 – 2,264)	**5,251 (3,744 – 6,934)**
Johnson R. ⟷ Napaskiak	71	92	1,028 (825 – 1,242)	1,226 (874 – 1,653)	0 (0 – 0)	2,082 (1,567 – 2,688)	**4,336 (3,475 – 5,285)**
Napaskiak ⟷ Akiachak	163	218	2,565 (2,069 – 3,088)	1,710 (1,280 – 2,249)	19 (0 – 53)	4,037 (3,251 – 5,005)	**8,330 (6,771 – 10,175)**
Akiachak ⟷ Akiak	4	36	430 (349 – 520)	294 (222 – 390)	11 (1 – 25)	667 (528 – 826)	**1,402 (1,142 – 1,724)**
Akiak ⟷ Bogus Cr.	2	25	296 (241 – 359)	201 (154 – 265)	8 (1 – 17)	454 (364 – 559)	**958 (790 – 1,163)**
Total	**258**	**449**	**6,797 (5,746 – 8,011)**	**4,582 (3,849 – 5,364)**	**38 (12 – 73)**	**8,861 (7,808 – 10,117)**	**20,278 (17,882 – 23,007)**

TABLE 4. Estimated trips, average (95% confidence limits) total salmon catch per trip, and percent catch by species summarized for the areas above and below the confluence of the Johnson River with the Kuskokwim River. Quantities are derived from the strata- and species-specific harvest estimates, not the raw interview data.

			Salmon Species % Composition			
Location	**Total Trips**	**Total Catch/Trip**	**Chinook**	**Chum**	**Coho**	**Sockeye**
Downstream of Johnson R.	78	67 (48 – 89)	47% (38% – 55%)	22% (15% – 30%)	0% (0% – 0%)	31% (24% – 37%)
Upstream of Johnson R.	371	41 (36 – 46)	29% (26% – 31%)	23% (20% – 25%)	<1% (0% – 1%)	48% (45% – 51%)

FIGURE 1. Distributions of relevant quantities from all completed trips using drift nets. The mean quantity by primary data source is shown in the top right; BBH = Bethel Boat Harbor (ONC), CBM = Other Villages (KRITFC), FC = Bethel Area Fish Camps (ONC).



Appendix A: Detailed Interview Summaries

Column Meanings

- **Area**: the area of the river the trip occurred in
- **N**: the number of interviews with usable information in each area
- **Min**: the minimum value among trips in each area
- **25%**: the value that 25% of trips fell below in each area
- **Mean**: the average value across trips in each area
- **75%**: the value that 75% of trips fell below in each area
- **Max**: the maximum value among trips in each area

Information is for drift net trips only.

TABLE A1. Summary of drift net catch per trip of Chinook salmon by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	5	10	17	22	40
Johnson R. ⟷ Napaskiak	71	0	4	10	14	35
Napaskiak ⟷ Akiachak	163	0	2	9	12	64
Akiachak ⟷ Akiak	4	6	10	24	30	60
Akiak ⟷ Bogus Cr.	2	2	3	4	4	5
All	**258**	**0**	**3**	**10**	**14**	**64**

TABLE A2. Summary of drift net catch rate of Chinook salmon by fishing area (fish per 150 feet of net per hour).

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0.8	1.2	5.2	5.2	22.9
Johnson R. ⟷ Napaskiak	71	0	1.1	2.4	2.9	9.2
Napaskiak ⟷ Akiachak	162	0	0.9	2.8	3.3	25
Akiachak ⟷ Akiak	4	1.4	2.2	3.2	4.1	5.4
Akiak ⟷ Bogus Cr.	2	0.4	1	1.7	2.3	3
All	**257**	**0**	**1**	**2.8**	**3.3**	**25**

TABLE A3. Summary of drift net catch per trip of chum salmon by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	4	12	15	60
Johnson R. ⟷ Napaskiak	71	0	3	9	12	60
Napaskiak ⟷ Akiachak	163	0	1	6	8	70
Akiachak ⟷ Akiak	4	9	10	22	32	40
Akiak ⟷ Bogus Cr.	2	2	3	4	6	7
All	**258**	**0**	**1**	**8**	**11**	**70**

TABLE A4. Summary of drift net catch rate of chum salmon by fishing area (fish per 150 feet of net per hour).

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	0.6	2.4	3.8	5.7
Johnson R. ⟷ Napaskiak	71	0	0.6	2.8	3.1	27.7
Napaskiak ⟷ Akiachak	162	0	0.2	1.9	2.4	35
Akiachak ⟷ Akiak	4	1.8	1.8	3.6	4.5	7.1
Akiak ⟷ Bogus Cr.	2	1.2	1.2	1.2	1.3	1.3
All	**257**	**0**	**0.4**	**2.2**	**2.7**	**35**

TABLE A5. Summary of drift net catch per trip of coho salmon by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	0	0	0	0
Johnson R. ⟷ Napaskiak	71	0	0	0	0	0
Napaskiak ⟷ Akiachak	163	0	0	0	0	20
Akiachak ⟷ Akiak	4	0	5	10	15	20
Akiak ⟷ Bogus Cr.	2	2	2	2	2	2
All	**258**	**0**	**0**	**1**	**0**	**20**

TABLE A6. Summary of drift net catch rate of coho salmon by fishing area (fish per 150 feet of net per hour).

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	0	0	0	0
Johnson R. ⟷ Napaskiak	71	0	0	0	0	0
Napaskiak ⟷ Akiachak	162	0	0	0	0	1
Akiachak ⟷ Akiak	4	0	0.9	1.2	1.8	1.9
Akiak ⟷ Bogus Cr.	2	0.4	0.4	0.4	0.4	0.4
All	**257**	**0**	**0**	**0**	**0**	**1.9**

TABLE A7. Summary of drift net catch per trip of sockeye salmon by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	3	13	15	35
Johnson R. ⟷ Napaskiak	71	0	6	17	26	45
Napaskiak ⟷ Akiachak	163	0	4	14	16	110
Akiachak ⟷ Akiak	4	2	7	13	15	30
Akiak ⟷ Bogus Cr.	2	0	1	2	3	4
All	**258**	**0**	**5**	**14**	**20**	**110**

TABLE A8. Summary of drift net catch rate of sockeye salmon by fishing area (fish per 150 feet of net per hour).

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	0	0.8	3.3	4	14.8
Johnson R. ⟷ Napaskiak	71	0	1.9	4.8	5	27.6
Napaskiak ⟷ Akiachak	162	0	1.3	4.4	5	55
Akiachak ⟷ Akiak	4	0.5	1.5	1.7	2.1	2.7
Akiak ⟷ Bogus Cr.	2	0	0.6	1.2	1.8	2.4
All	**257**	**0**	**1.4**	**4.4**	**5**	**55**

TABLE A9. Summary of drift net percent composition of Chinook salmon by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	42%	46%	52%	54%	67%
Johnson R. ⟷ Napaskiak	71	9%	22%	32%	39%	82%
Napaskiak ⟷ Akiachak	163	0%	18%	33%	45%	100%
Akiachak ⟷ Akiak	4	16%	28%	32%	40%	40%
Akiak ⟷ Bogus Cr.	2	18%	18%	18%	18%	18%
All	**258**	**0%**	**20%**	**33%**	**44%**	**100%**

TABLE A10. Summary of drift net trip duration by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	2.5	7	8.3	9.4	15.2
Johnson R. ⟷ Napaskiak	71	1	4.5	6.6	8.8	14
Napaskiak ⟷ Akiachak	162	0.5	4	6.3	8.7	14.9
Akiachak ⟷ Akiak	4	9.1	11.3	11.3	12	12
Akiak ⟷ Bogus Cr.	2	8.4	9.3	10.2	11.1	12
All	**257**	**0.5**	**4.4**	**6.6**	**9**	**15.2**

TABLE A11. Summary of drift net active fishing hours by fishing area.

Area	N	Min	25%	Mean	75%	Max
Tuntutuliak ⟷ Johnson R.	18	1.3	2.4	4.1	5.2	8.5
Johnson R. ⟷ Napaskiak	71	0.8	2.6	5	7.5	10.5
Napaskiak ⟷ Akiachak	162	0.2	2	4.2	5.8	12
Akiachak ⟷ Akiak	4	3	3	4.8	5.8	8
Akiak ⟷ Bogus Cr.	2	1.7	2	2.3	2.7	3
All	**257**	**0.2**	**2.1**	**4.4**	**6**	**12**

Appendix B: Non-salmon Harvest Information

- An estimated total of **137 (80 – 215)** nonsalmon were harvested.
  - An estimated total of **70 (34 – 119)** sheefish were harvested.
  - An estimated total of **67 (25 – 134)** all whitefishes were harvested.
- Harvest by set nets accounted for an estimated **0 (0 – 0)** total nonsalmon (**0%** sheefish and **0%** all whitefishes).

TABLE B1. Summaries by river stratum (area) for drift nets. Numbers in parentheses are 95% confidence intervals.

			Estimated Harvest		
Stratum	**Interviews**	**Effort Est.**	**Sheefish**	**Whitefish**	**Total**
Tuntutuliak ⟷ Johnson R.	18	78	2 (0 – 7)	0 (0 – 0)	**2 (0 – 7)**
Johnson R. ⟷ Napaskiak	71	92	24 (3 – 63)	9 (1 – 19)	**33 (9 – 72)**
Napaskiak ⟷ Akiachak	163	218	34 (12 – 64)	46 (8 – 113)	**80 (32 – 149)**
Akiachak ⟷ Akiak	4	36	6 (2 – 11)	7 (1 – 18)	**13 (5 – 25)**
Akiak ⟷ Bogus Cr.	2	25	4 (2 – 8)	5 (1 – 13)	**9 (4 – 17)**
Total	**258**	**449**	**70 (34 – 119)**	**67 (25 – 134)**	**137 (80 – 215)**

TABLE B2. Summary of drift net catch per trip of sheefish by fishing area.

Area	**N**	**Min**	**25%**	**Mean**	**75%**	**Max**
Tuntutuliak ⟷ Johnson R.	18	0	0	0	0	1
Johnson R. ⟷ Napaskiak	71	0	0	0	0	6
Napaskiak ⟷ Akiachak	163	0	0	0	0	2
Akiachak ⟷ Akiak	4	0	0	0	0	2
Akiak ⟷ Bogus Cr.	2	0	0	0	0	0
All	**258**	**0**	**0**	**0**	**0**	**6**

TABLE B3. Summary of drift net catch per trip of all whitefishes by fishing area.

Area	**N**	**Min**	**25%**	**Mean**	**75%**	**Max**
Tuntutuliak ⟷ Johnson R.	18	0	0	0	0	0
Johnson R. ⟷ Napaskiak	71	0	0	0	0	2
Napaskiak ⟷ Akiachak	163	0	0	0	0	1
Akiachak ⟷ Akiak	4	0	0	0	0	0
Akiak ⟷ Bogus Cr.	2	0	0	0	1	1
All	**258**	**0**	**0**	**0**	**0**	**2**

Kuskokwim River Salmon Assessment Update
6/26/2023

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

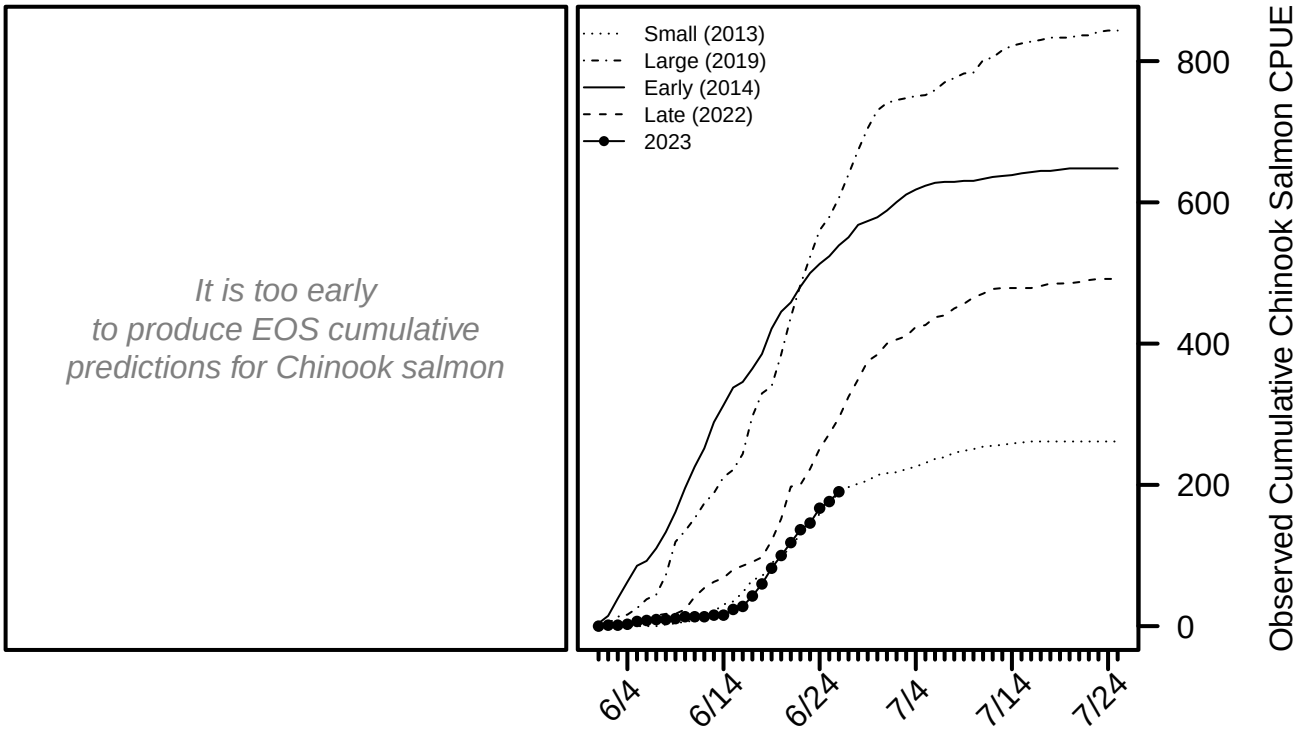
For the most up-to-date information regarding fishing opportunities please visit:

- **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 (6/26)

- The BTF daily CPUE was **14**.
- The BTF cumulative CPUE is now **190**.
- **14%** years since 2008 fell below this cumulative CPUE on this date.
- **65%** of the run is complete based on historical average run timing.
- **55% - 75%** of the run is complete based the central 50% of all historical run timing scenarios.
- **11% - 18%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **20%** of the BTF catches, compared to **12%** 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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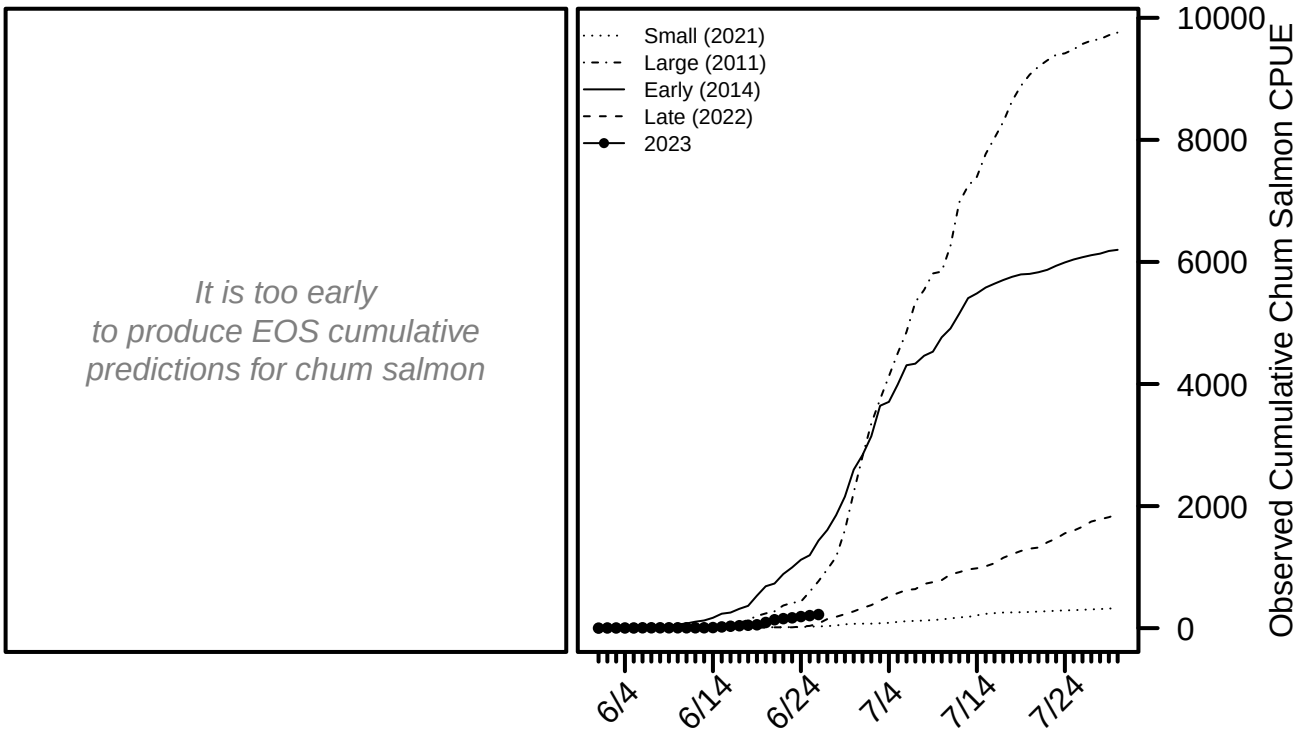
Chum Salmon BTF Summary (6/26)

- The BTF daily CPUE was **17**.
- The BTF cumulative CPUE is now **222**.
- **21%** years since 2008 fell below this cumulative CPUE on this date.
- **17%** of the run is complete based on historical average run timing.
- **9% - 27%** of the run is complete based the central 50% of all historical run timing scenarios.
- **15% - 17%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **25%** of the BTF catches, compared to **52%** 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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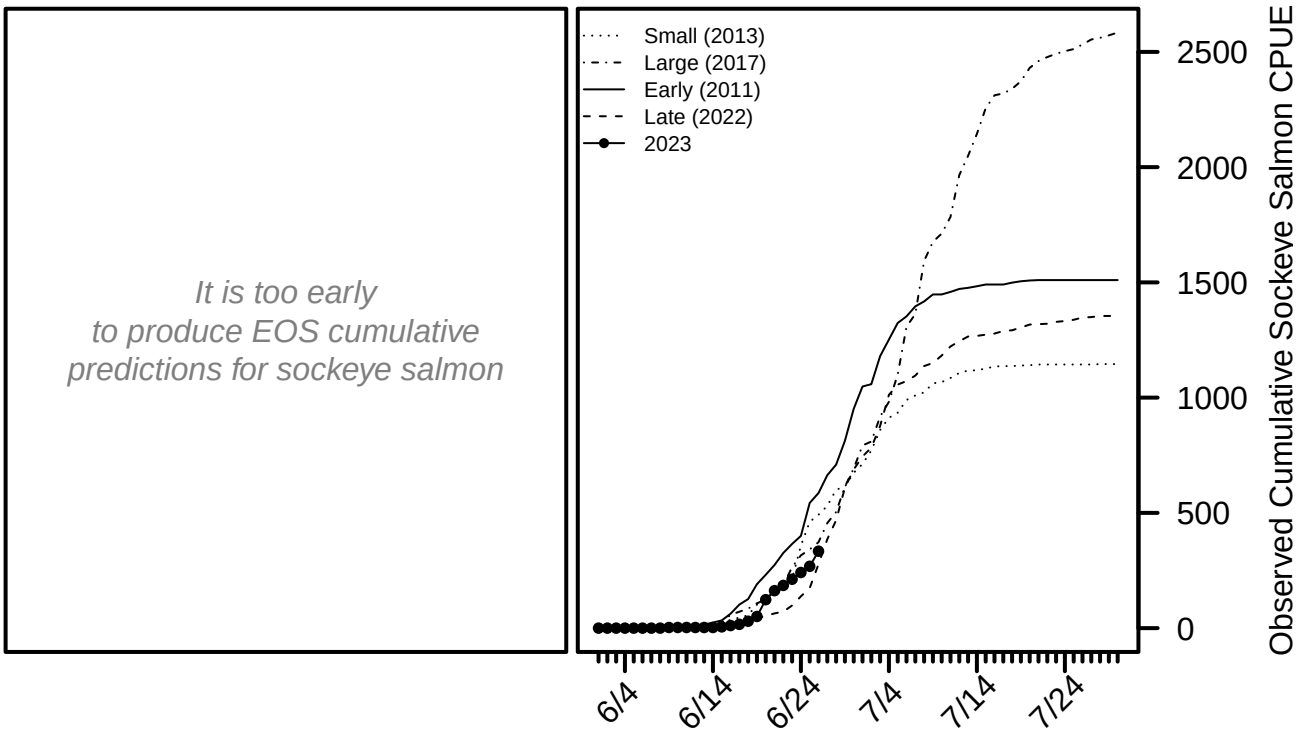
Sockeye Salmon BTF Summary (6/26)

- The BTF daily CPUE was **65**.
- The BTF cumulative CPUE is now **334**.
- **57%** years since 2008 fell below this cumulative CPUE on this date.
- **34%** of the run is complete based on historical average run timing.
- **22% - 48%** of the run is complete based on the central 50% of all historical run timing scenarios.
- **23% - 26%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up **55%** of the BTF catches, compared to **36%** 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.*

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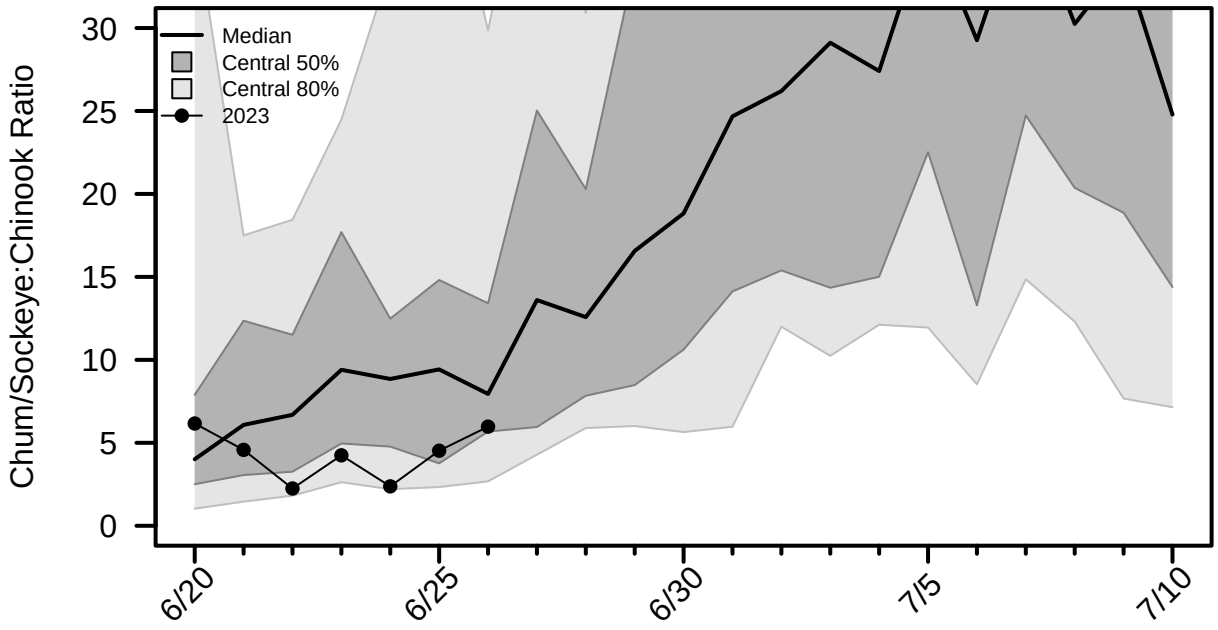
Chum/Sockeye:Chinook Salmon Ratio

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
6/23	4.25	9.4	2.62	24.48	0.96
6/24	2.38	8.85	2.21	33.68	0.26
6/25	4.52	9.43	2.33	43.02	0.89
6/26	**5.97**	**7.95**	**2.68**	**29.84**	**0.29**
6/27		13.61	4.29	44.78	
6/28		12.58	5.89	30.91	
6/29		16.57	6.01	56.73	

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
6/23	100%	95%	90%	62%	31%
6/24	100%	95%	90%	69%	36%
6/25	100%	95%	92%	77%	38%
6/26	**100%**	**95%**	**95%**	**79%**	**41%**
6/27	100%	100%	95%	79%	51%
6/28	100%	100%	97%	85%	59%
6/29	100%	100%	100%	87%	67%

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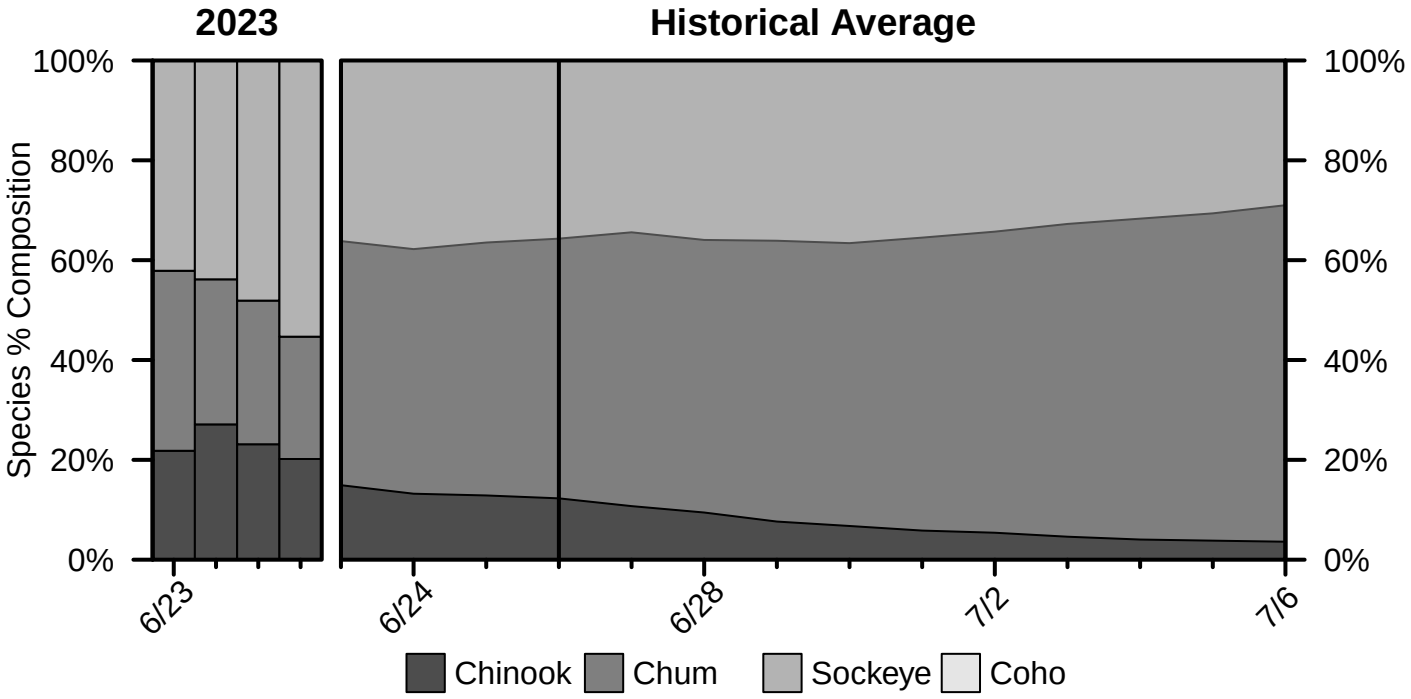
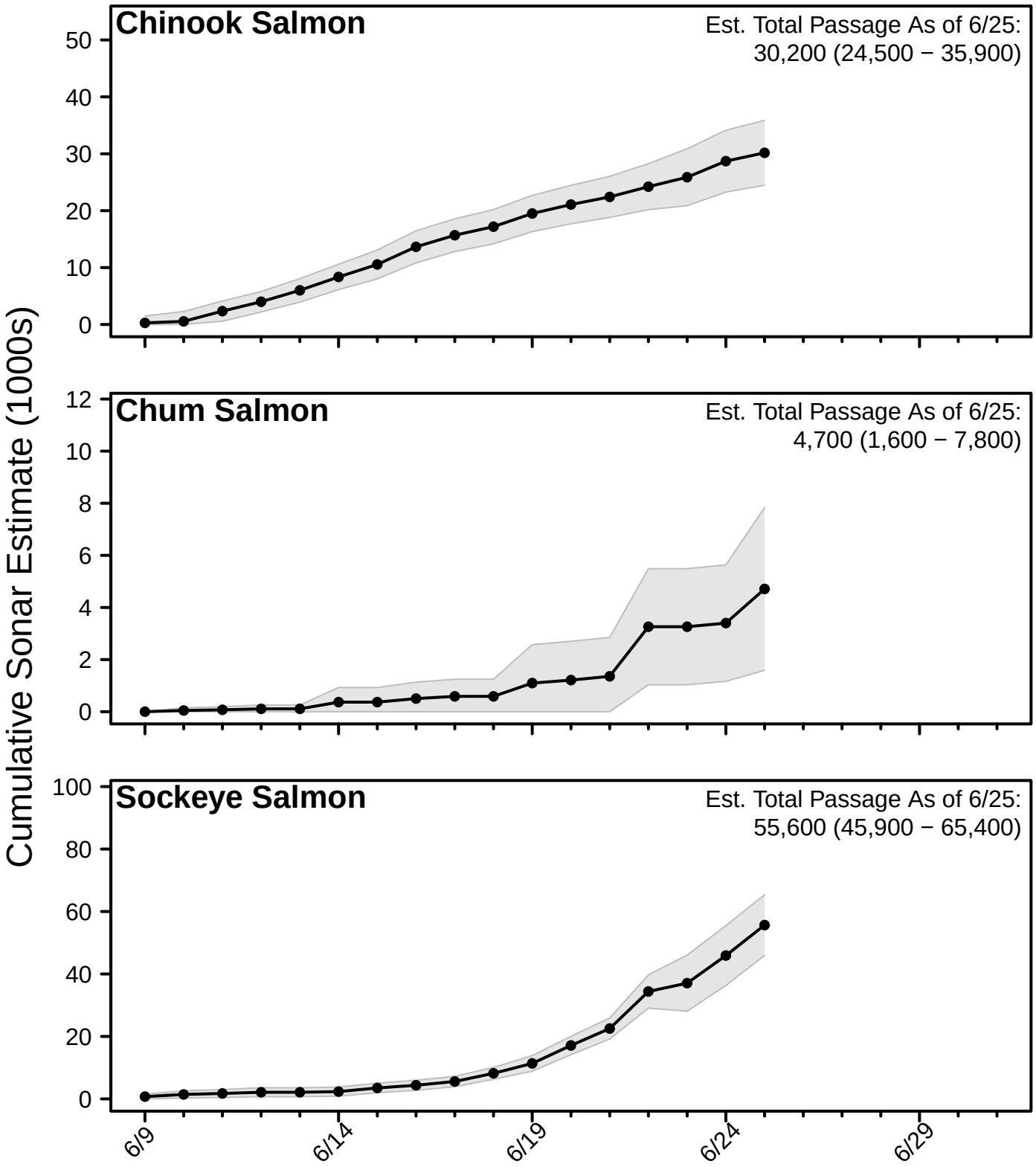
Percent Composition by Salmon Species

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.



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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.
6/23	146	222	232	197	523	290	288
6/24	167	251	247	203	561	314	309
6/25	176	272	266	230	579	340	329
6/26	**190**	**295**	**273**	**262**	**606**	**365**	**355**
6/27		325	293	274	640	387	373
6/28		349	336	282	674	415	391
6/29		375	355	298	705	439	411
EOS		504	532	487	848	608	562

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2023	2022	2021	2020	2019
6/23	40	284	554	311	973
6/24	139	318	624	357	1,023
6/25	204	386	677	403	1,139
6/26	**244**	**477**	**752**	**487**	**1,181**
6/27		547	823	554	1,321
6/28		631	922	653	1,359
6/29		690	922	765	1,367
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	6/26 Cumulative %
Earliest	6/14	89%
Early 10%	6/18	83%
Early 25%	6/21	75%
Median	6/22	66%
Late 25%	6/25	55%
Late 10%	6/26	45%
Latest	7/3	34%

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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.
6/23	168	14	17	50	186	196	438
6/24	189	26	17	50	224	221	509
6/25	205	36	25	59	257	251	589
6/26	**222**	**75**	**28**	**71**	**294**	**293**	**698**
6/27		149	33	95	357	357	832
6/28		185	43	150	582	441	955
6/29		229	62	197	816	542	1,134
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
6/23	6	7	13	59	19
6/24	19	7	13	65	31
6/25	64	7	19	86	88
6/26	**70**	**19**	**19**	**148**	**177**
6/27		19	19	169	266
6/28		30	19	218	311
6/29		35	19	326	311
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	6/26 Cumulative %
Earliest	6/23	52%
Early 10%	7/1	39%
Early 25%	7/3	27%
Median	7/6	17%
Late 25%	7/9	9%
Late 10%	7/11	5%
Latest	7/16	2%

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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.
6/23	212	98	105	68	173	103	201
6/24	241	138	139	74	204	129	241
6/25	268	174	186	90	212	158	285
6/26	**334**	**277**	**200**	**136**	**221**	**203**	**334**
6/27		386	274	168	272	261	386
6/28		468	332	172	476	333	444
6/29		609	421	190	577	419	517
EOS		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
6/23	0	6	13	0	0
6/24	13	13	19	0	0
6/25	26	25	19	0	11
6/26	**32**	**31**	**32**	**0**	**22**
6/27		31	38	0	22
6/28		31	51	12	22
6/29		47	51	24	22
EOS		129	241	209	33

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

Timing	Midpoint	6/26 Cumulative %
Earliest	6/22	75%
Early 10%	6/24	62%
Early 25%	6/27	49%
Median	6/29	34%
Late 25%	7/2	21%
Late 10%	7/6	13%
Latest	7/10	6%

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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

Saturday, June 24, 2023

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*	1	3,414	0	58	576
Dolgoi Island Area2	0	0	0	0	0
June Shumagin Islands	298	216,356	1	59,270	64,667
June South Unimak	1,129	516,133	20	73,033	87,421
	1,428	**735,903**	**21**	**132,361**	**152,664**