

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: 07/19/2023

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

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 19, 2023

Fisheries Program Updates

ONC Fisheries Program would like to thank everyone who volunteered and participated in this year's Subsistence Salmon Harvest Program. This program wouldn't be possible without all the assistance that we get from our surrounding fish camp families and the community of Bethel, at the Boat Harbor.

ONC is at the near end of the season, as we are wrapping up 2023. We are researching the possibilities of continuing our work to help with harvest assessments for Chum and Coho. Once I get more answers and information I will report back next week.

ONC still has 3 more aerial flight funding left in the season to assist with the end of July. Since, we were only able to extend that funding from last year's carry over.

Harvest Goals

ONC is still conducting our end of the season harvest goals reflection. As of July 19, we have conducted 75% of our overall fish camps survey goals. ONC will have a completed 100% harvest goal report at the next meeting. This past week, ONC has not had any issues with collecting harvest goals. Thank you to everyone who has participated.

Dates Completed:

Chinook (King) Salmon: Out of the 75% completed surveys, 100% have completed fishing for Chinook Salmon on June 23 and June 30. Majority of the families concluded on targeting Chinook Salmon on the last drift opener of June 23rd.

Sockeye (Red) Salmon: Out of the 75% completed surveys, 100% have completed fishing for Sockeye Salmon on June 30.

Chum Salmon: Out of the 75% completed surveys, 100% have completed fishing for Chum Salmon on June 30.

Comments: Out of the 75% completed surveys, there are two families that are still fishing, and will continue to fish throughout the season. Since, they fish for fresh fish, freezer fish, jarring, and additional fish as needed.

Dates Completed:

Chinook (King) Salmon: Out of the 75% completed surveys, 100% have **NOT MET** their harvest goals or historical harvest goals.

Comments: They did not get as much as they wanted. They needed more, but will be ok. They need more kings.

Sockeye (Red) Salmon: Out of the 75% completed surveys, 100% have **MET** their harvest goals.

Comments: They had gotten more than enough Reds this year. Reds were very abundant this year. Many families reported that they were specifically targeting Sockeye. This was the first year, where Reds were clean meat and didn't have very many worms.



ORUTSARARMIUT NATIVE COUNCIL

NATURAL RESOURCES FISHERIES PROGRAM

Weekly Report: July 19, 2023

Chum Salmon: Out of the 75% completed surveys, 100% have ***NOT MET*** their harvest goals or their historical harvest goals.

Comments: Majority of the families responses was they would like more Chum Salmon and that there were not as many Chums during any of the fishing openers. That they hardly caught any, because the Chum Salmon weren't as abundant. One family reported that the historical run of Chums is towards the midpoint of July to the very end of July. Right before the Coho season starts to show up.

Survey Efforts

As of Jul 19, 2023, ONC has conducted 235 Fish Camp Surveys and 641 Boat Harbor Surveys. The largest fish camp surveys and boat harbor surveys were both on June 17, 2023 and June 23, 2023. On June 17, 2023 the Boat Harbor reflected 145 and Fish Camp reflected 39 completed surveys. On June 23, 2023 the Boat Harbor reflected 154 and Fish Camp reflected 38 completed surveys.

After the 17th and the 23rd of June, our survey numbers decreased significantly, highlighting that the provided dates were at the peak of the Salmon harvest.

Table 1. Broken down overall total salmon harvest reports from the Bethel Area Fish Camps & Boat Harbor Surveys for 2023.

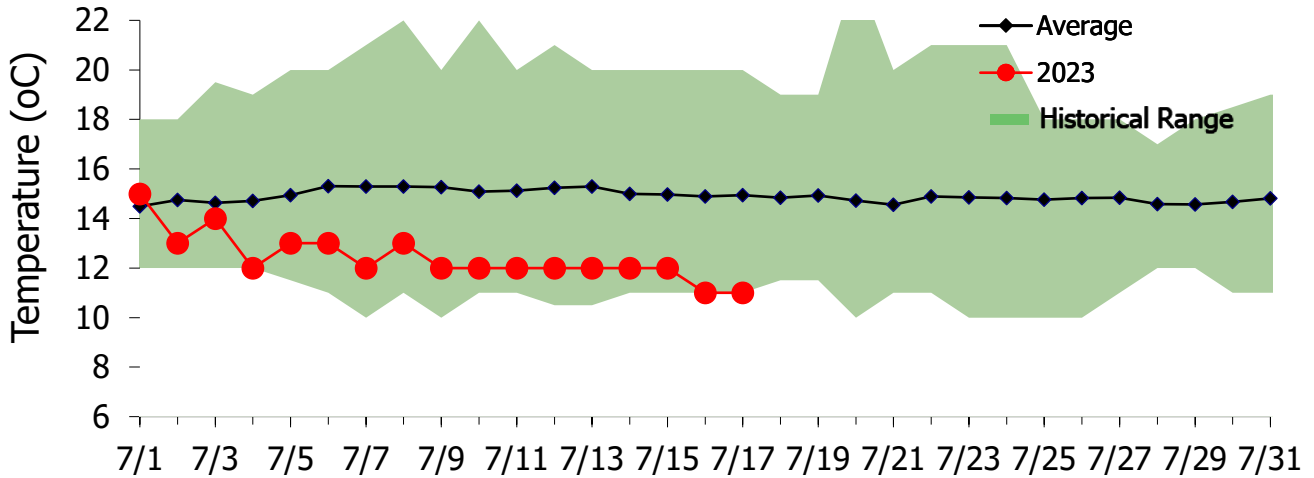
Surveys broken down by type	Number of Surveys Conducted	Total Chinook Harvest	Total Chum Harvest	Total Sockeye Harvest	Total Other Harvest
Fish Camps	235	1212	470	2269	143
Boat Harbor	641	3196	1581	3984	195
Total Overall Harvest Numbers Fish Camps & Boat Harbor	Total Surveys Conducted	Total Chinook Harvest	Total Chum Harvest	Total Sockeye Harvest	Total Other Harvest
	876	4408	2051	6253	338

Fish Distribution

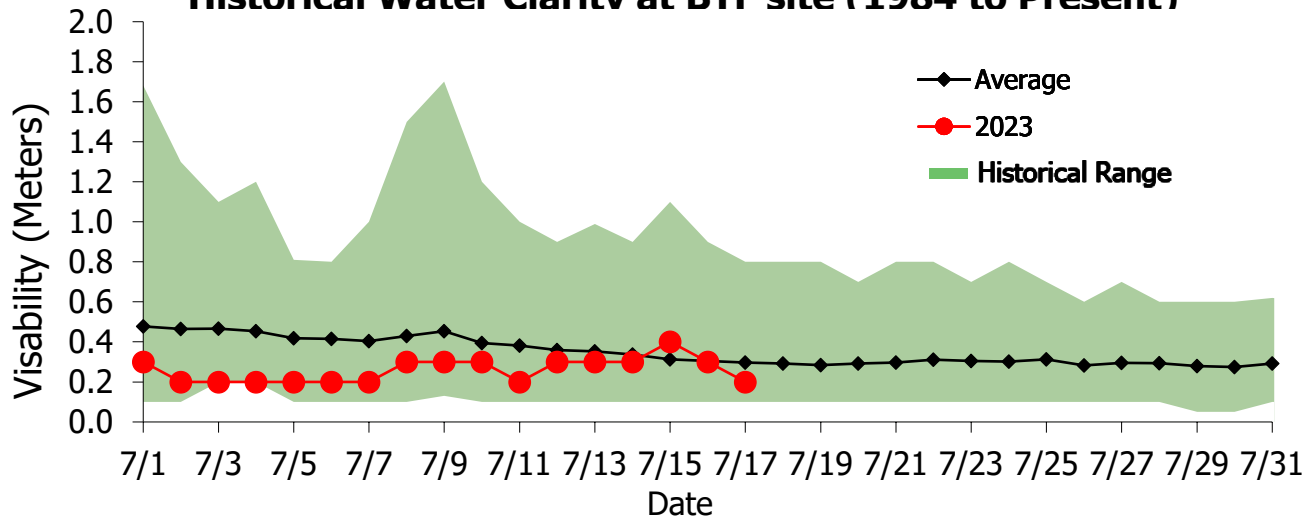
ONC has concluded fish distribution to 156 households in Bethel, 4 Elder Facilities, 1 Prematernal, 6 surrounding communities. ONC also distributed to a series of organizations that help with Elderly care, Children Foster Care, homelessness, and veteran affairs.

We have appreciated being able to share this Elder's fresh fish opportunity with all those that reached out. We are thankful for all those who have helped in this process including Yute, Grant Aviation, and USFWS Law Enforcement for helping get the ADFG BTF fish delivered.

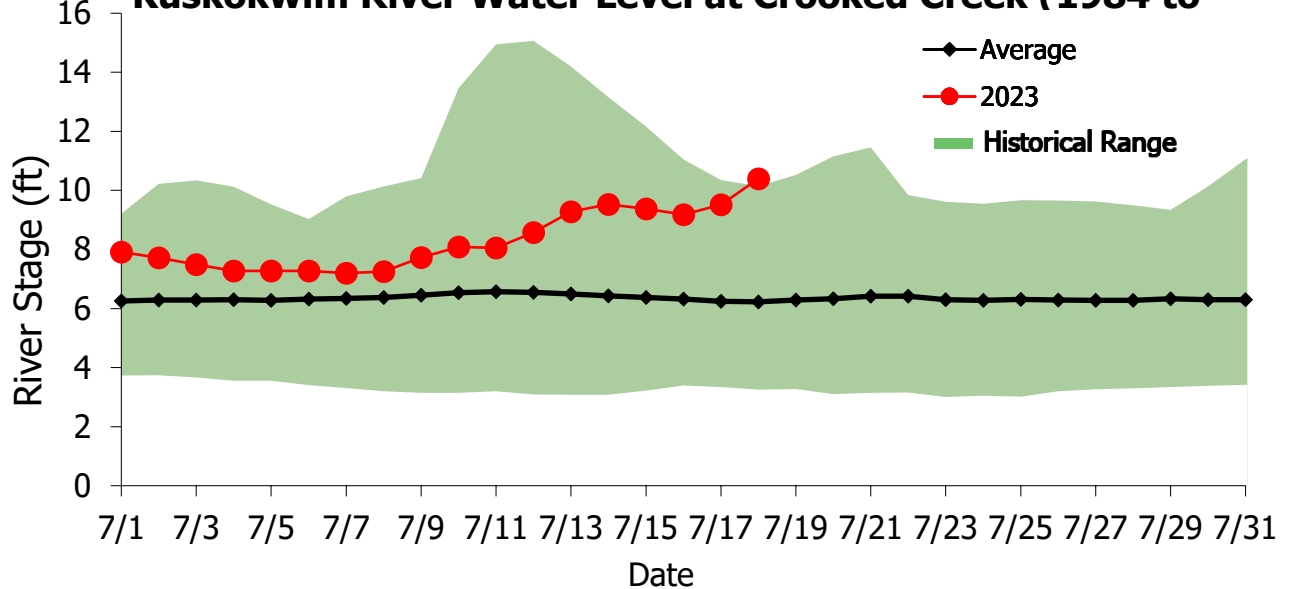
Historical Water Temperature at BTF Site (1984 to



Historical Water Clarity at BTF site (1984 to Present)



Kuskokwim River Water Level at Crooked Creek (1984 to



Kuskokwim River Salmon Assessment Update

7/17/2023



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](#)
- Page 5: [Coho Salmon](#)

Species Composition Summaries

- Page 6: [Percent Composition](#)

Appendices

- Page 7: [Sonar Passage Estimates](#)
- Page 8: [In-Season Harvest Estimates](#)
- Page 9: [Chinook Salmon](#)
- Page 10: [Chum Salmon](#)
- Page 11: [Sockeye Salmon](#)
- Page 12: [Coho Salmon](#)

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>

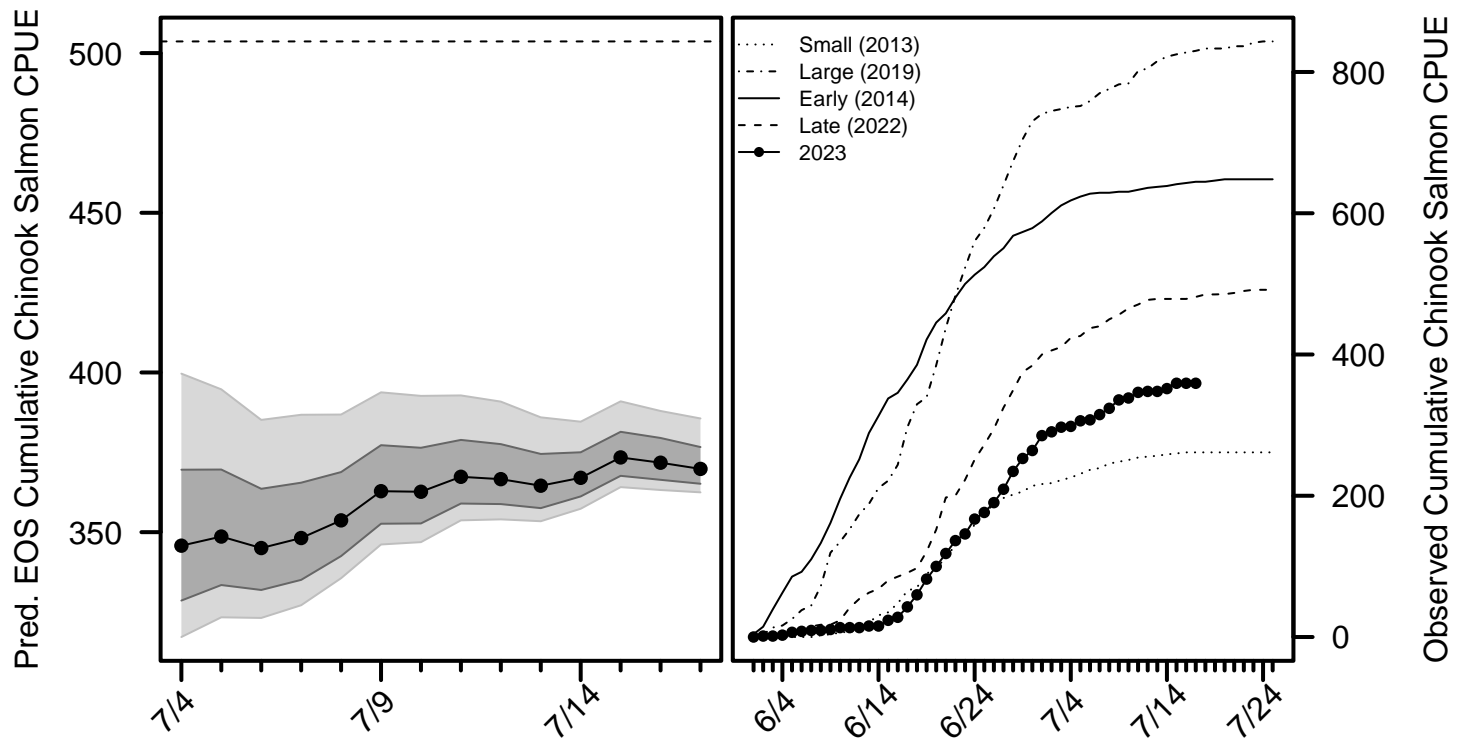
For the most up-to-date information regarding fishing opportunities please visit:

- 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 (7/17)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now **359**.
- **14%** years since 2008 fell below this cumulative CPUE on this date.
- **97%** of the run is complete based on historical average run timing.
- **95% - 98%** of the run is complete based the central 50% of all historical run timing scenarios.
- **1% - 2%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **1%** of the BTF catches, compared to **2%** 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 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.



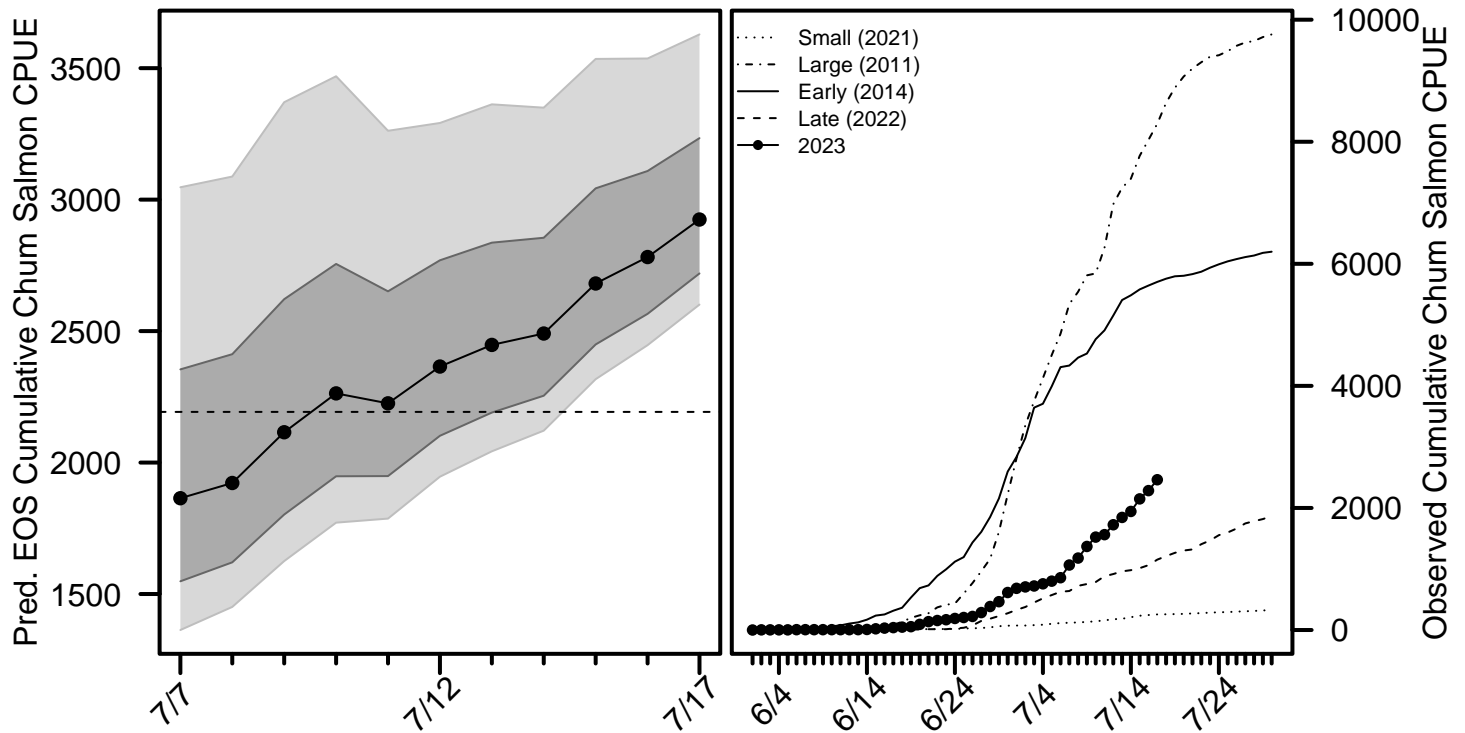
For more detailed information, see the [Chinook salmon appendix](#) at the end of this document.

[Return to Table of Contents](#)

Chum Salmon BTF Summary (7/17)

- The BTF daily CPUE was **178**.
- The BTF cumulative CPUE is now **2,462**.
- **29%** years since 2008 fell below this cumulative CPUE on this date.
- **84%** of the run is complete based on historical average run timing.
- **76% - 90%** of the run is complete based the central 50% of all historical run timing scenarios.
- **6% - 11%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **79%** of the BTF catches, compared to **79%** 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.



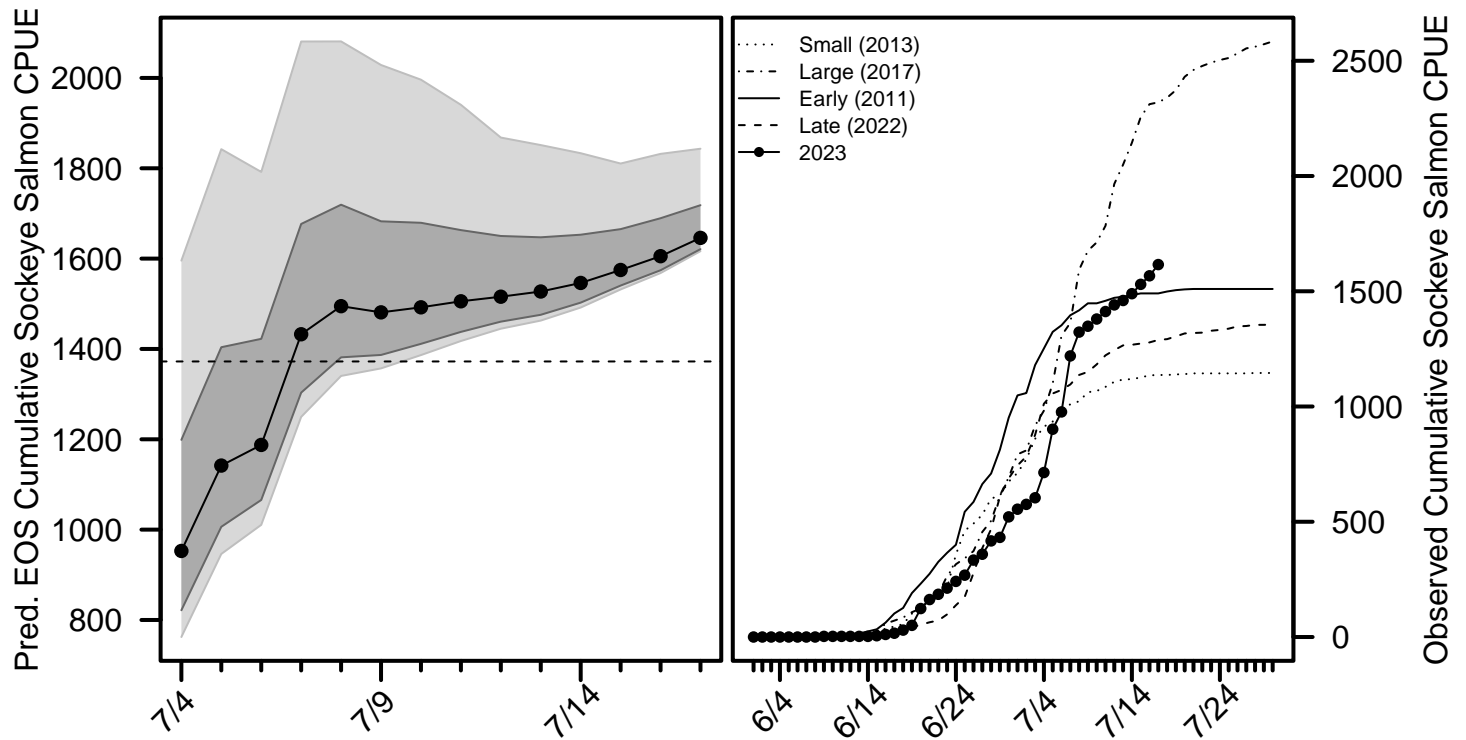
For more detailed information, see the [chum salmon appendix](#) at the end of this document.

[Return to Table of Contents](#)

Sockeye Salmon BTF Summary (7/17)

- The BTF daily CPUE was **49**.
- The BTF cumulative CPUE is now **1,616**.
- **64%** years since 2008 fell below this cumulative CPUE on this date.
- **98%** of the run is complete based on historical average run timing.
- **94% - 100%** of the run is complete based on the central 50% of all historical run timing scenarios.
- **0% - 3%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, sockeye salmon made up **19%** of the BTF catches, compared to **14%** 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.



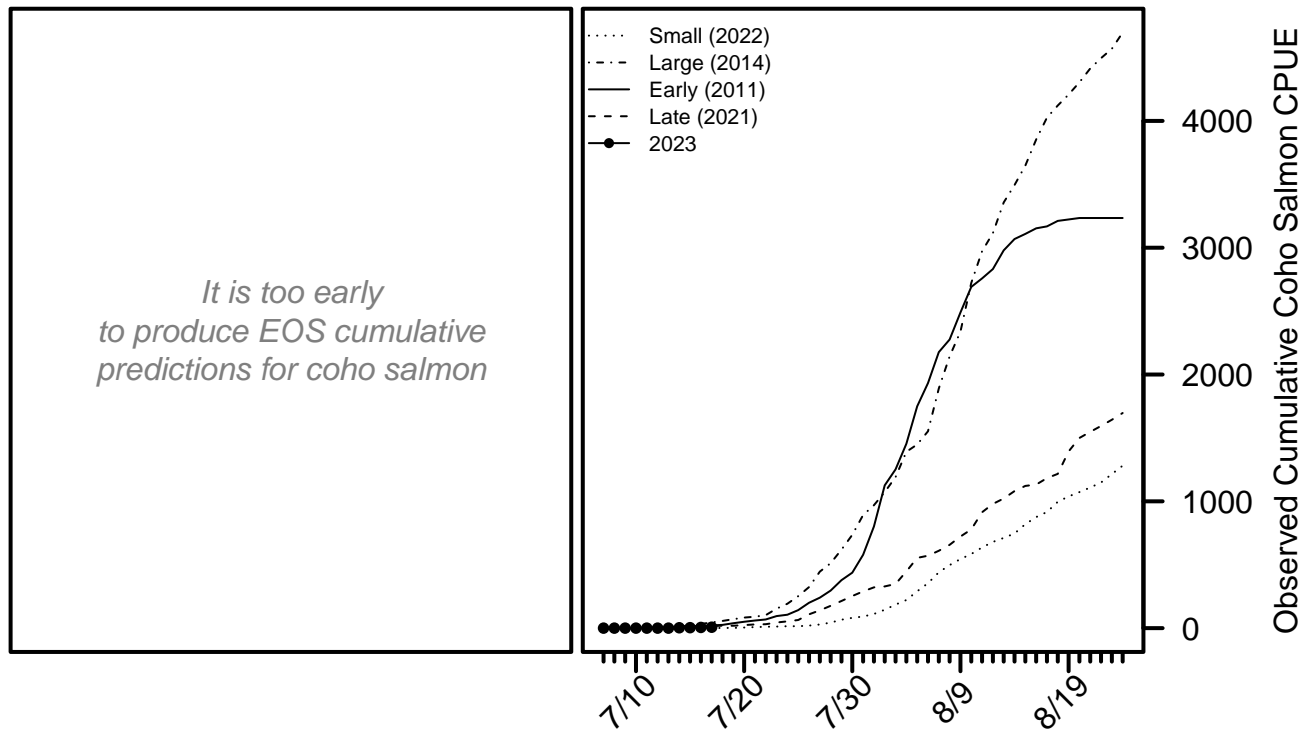
For more detailed information, see the [sockeye salmon appendix](#) at the end of this document.

[Return to Table of Contents](#)

Coho Salmon BTF Summary (7/17)

- The BTF daily CPUE was **2**.
- The BTF cumulative CPUE is now **7**.
- **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% - 1%** of the run is complete based the central 50% of all historical run timing scenarios.
- **0% - 3%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, coho salmon made up **1%** of the BTF catches, compared to **5%** on average.

Coho 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.

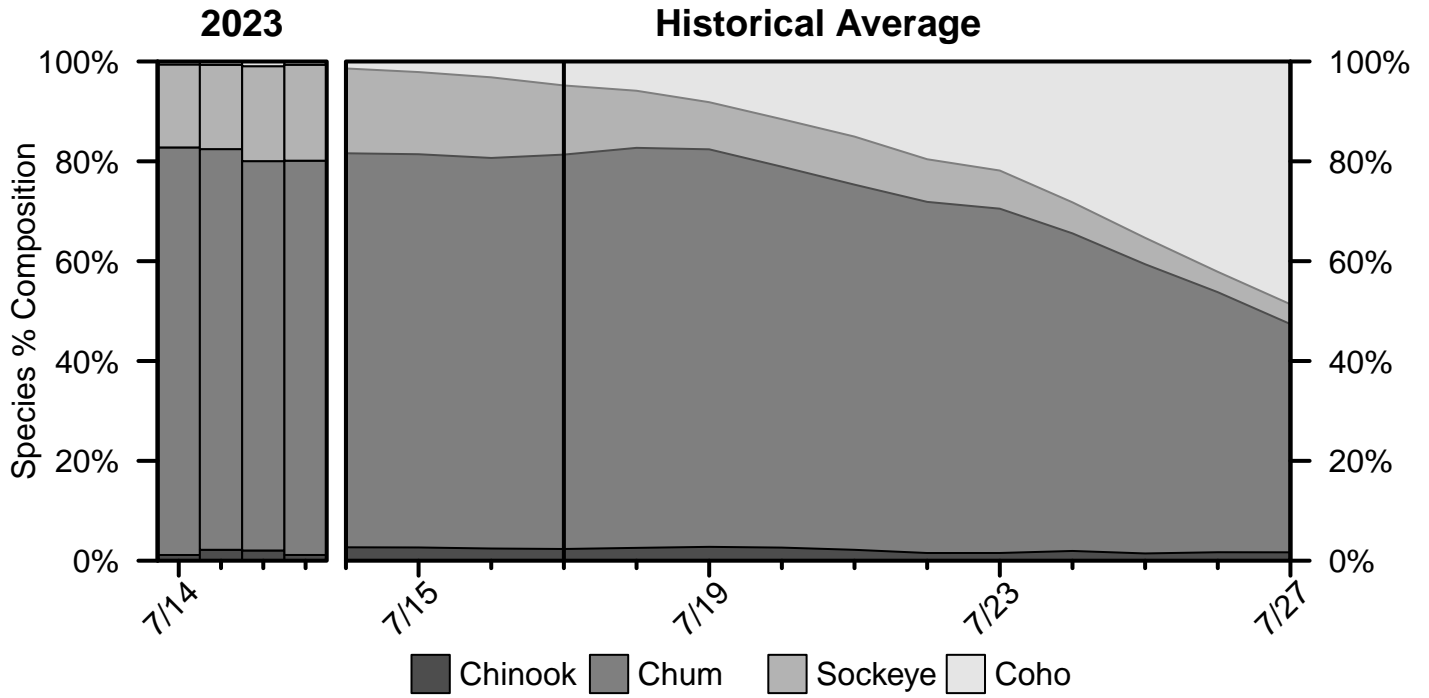


For more detailed information, see the [coho salmon appendix](#) at the end of this document.

[Return to Table of Contents](#)

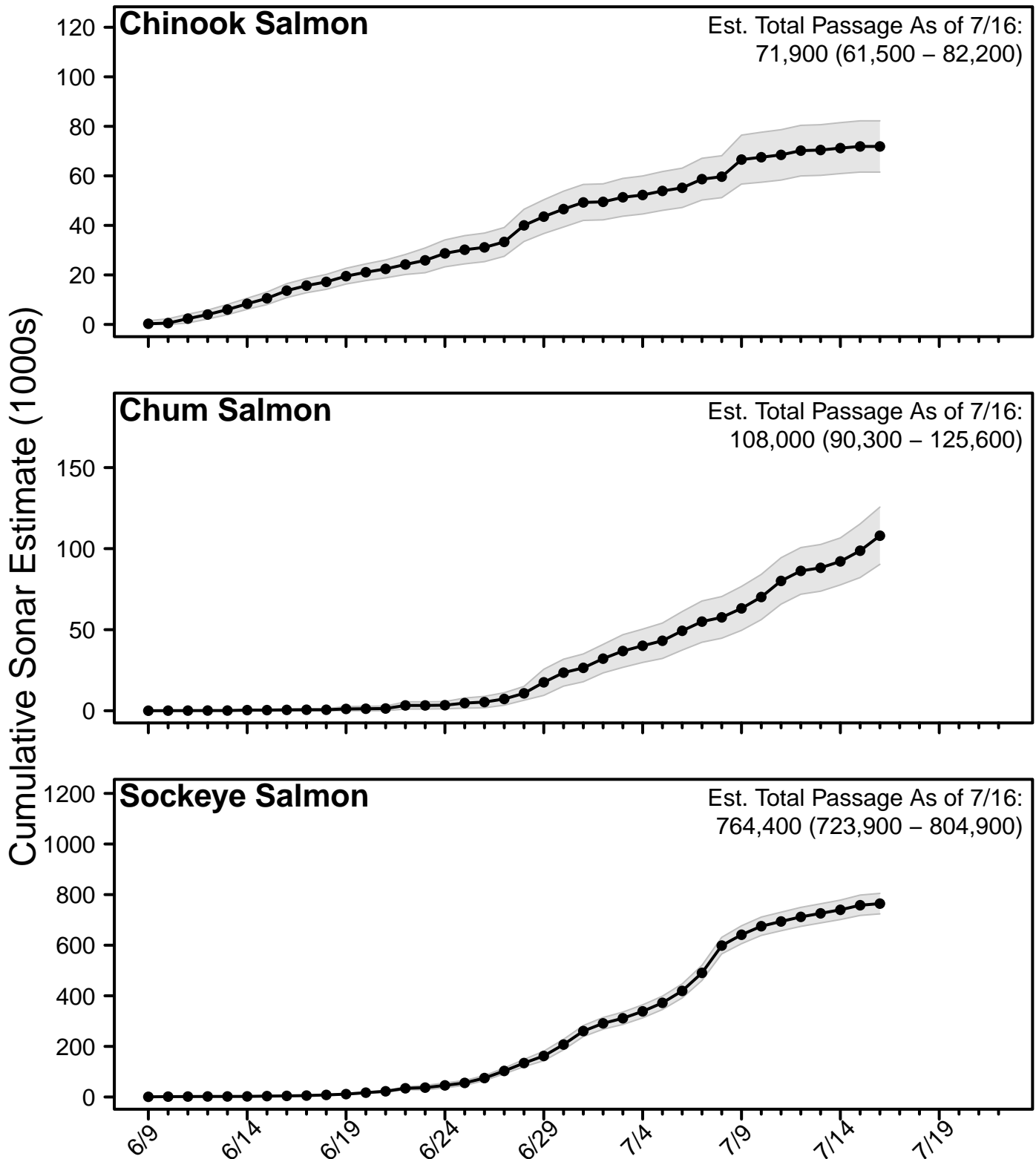
Percent Composition by Salmon Species

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).

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
6/3	380	380	0.3	0.3
6/6	220	600	0.17	0.2
6/9	1,060	1,660	0.21	0.15
6/12	1,000	2,660	0.1	0.1
6/17	10,440	13,100	0.08	0.07
6/23	6,950	20,050	0.09	0.05
6/30	590	20,640	0.12	0.05
7/4	120	20,760	0.35	0.05
7/11	260	21,020	0.12	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
6/3	0	0	0	0
6/6	0	0	0	NA
6/9	20	20	0.29	0.29
6/12	110	130	0.17	0.15
6/17	2,960	3,090	0.13	0.12
6/23	4,650	7,740	0.08	0.07
6/30	1,300	9,040	0.14	0.06
7/4	280	9,320	0.26	0.06
7/11	1,910	11,230	0.14	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
6/3	0	0	0	0
6/6	0	0	0	NA
6/9	120	120	0.21	0.21
6/12	410	530	0.17	0.14
6/17	6,160	6,690	0.15	0.14
6/23	9,540	16,230	0.07	0.07
6/30	6,450	22,680	0.25	0.09
7/4	1,230	23,910	0.2	0.08
7/11	4,480	28,390	0.08	0.07

[Return to Table of Contents](#)

Chinook Salmon Appendix

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
7/14	352	479	512	457	822	580	535
7/15	359	479	517	462	825	584	538
7/16	359	479	523	469	828	588	541
7/17	359	482	527	474	830	591	543
7/18		485	527	476	833	594	546
7/19		485	527	478	833	594	548
7/20		485	527	478	833	594	549
EOS		504	532	487	848	608	562

Chinook Salmon Table A2. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	7/17 Cumulative %
Earliest	6/14	100%
Early 10%	6/18	99%
Early 25%	6/21	98%
Median	6/22	97%
Late 25%	6/25	95%
Late 10%	6/26	93%
Latest	7/3	90%

The ATF ended operations on 7/14 with an EOS cumulative CPUE value of 748 for Chinook salmon, which was below the 2019-2022 average EOS cumulative CPUE of 1,683.

[Return to Table of Contents](#)

Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
7/14	1,943	980	210	987	2,917	2,240	3,996
7/15	2,148	1,014	234	1,020	3,115	2,359	4,161
7/16	2,284	1,063	246	1,055	3,336	2,499	4,289
7/17	2,462	1,153	256	1,131	3,683	2,654	4,425
7/18		1,210	257	1,156	3,985	2,766	4,572
7/19		1,265	261	1,176	4,170	2,826	4,680
7/20		1,302	264	1,187	4,382	2,881	4,763
EOS		2,193	327	1,442	6,427	3,720	5,590

Chum Salmon Table A2. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	7/17 Cumulative %
Earliest	6/23	97%
Early 10%	7/1	95%
Early 25%	7/3	91%
Median	7/6	84%
Late 25%	7/9	76%
Late 10%	7/11	68%
Latest	7/16	58%

The ATF ended operations on 7/14 with an EOS cumulative CPUE value of 996 for chum salmon, which was below the 2019-2022 average EOS cumulative CPUE of 1,220.

[Return to Table of Contents](#)

Sockeye Salmon Appendix

Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
7/14	1,489	1,268	1,513	887	1,960	1,457	1,470
7/15	1,530	1,273	1,533	904	2,020	1,484	1,510
7/16	1,567	1,278	1,568	923	2,070	1,513	1,532
7/17	1,616	1,289	1,585	949	2,156	1,555	1,558
7/18		1,292	1,592	967	2,217	1,582	1,577
7/19		1,304	1,604	976	2,283	1,615	1,597
7/20		1,317	1,608	985	2,337	1,634	1,613
EOS		1,372	1,694	1,060	2,685	1,817	1,747

Sockeye Salmon Table A2. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	7/17 Cumulative %
Earliest	6/22	100%
Early 10%	6/24	100%
Early 25%	6/27	100%
Median	6/29	98%
Late 25%	7/2	94%
Late 10%	7/6	88%
Latest	7/10	78%

The ATF ended operations on 7/14 with an EOS cumulative CPUE value of 369 for sockeye salmon, which was above the 2019-2022 average EOS cumulative CPUE of 153.

[Return to Table of Contents](#)

Coho Salmon Appendix

Coho Salmon Table A1. Cumulative CPUE from the BTF.

Date	2023	2022	2021	2020	2019	5-Yr Avg.	2008 - 2022 Avg.
7/14	3	0	12	0	2	3	4
7/15	3	0	17	3	4	5	8
7/16	5	0	17	5	5	5	12
7/17	7	0	17	5	5	5	16
7/18		2	19	5	5	6	21
7/19		2	19	5	5	6	28
7/20		5	24	5	13	9	37
EOS		1,281	1,696	1,822	1,801	1,500	2,813

Coho Salmon Table A2. Percent of run complete according to various historical run timing scenarios from the BTF.

Timing	Midpoint	7/17 Cumulative %
Earliest	7/29	2%
Early 10%	8/4	1%
Early 25%	8/6	1%
Median	8/9	<1%
Late 25%	8/11	<1%
Late 10%	8/13	<1%
Latest	8/15	<1%

[Return to Table of Contents](#)

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

Saturday, July 15, 2023

South Peninsula	Chinook	Sockeye	Coho	Pink	Chum
Post June Cold Bay	33	12,485	862	10,738	67,580
Post June Thin Point Section	0	0	0	0	0
Post June Morzhovoi Bay to South Unimak	38	12,365	4,285	19,888	43,408
Post June Shumagin Islands	541	114,581	21,756	184,724	37,198
Southeastern District Mainland	0	0	0	0	0
Northwest Stepovak Section (7/1-7/25)	0	2,940	8	419	277
Dolgoi Island Area1*	29	29,834	983	14,660	19,518
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
	2,376	1,046,396	28,028	441,304	366,718

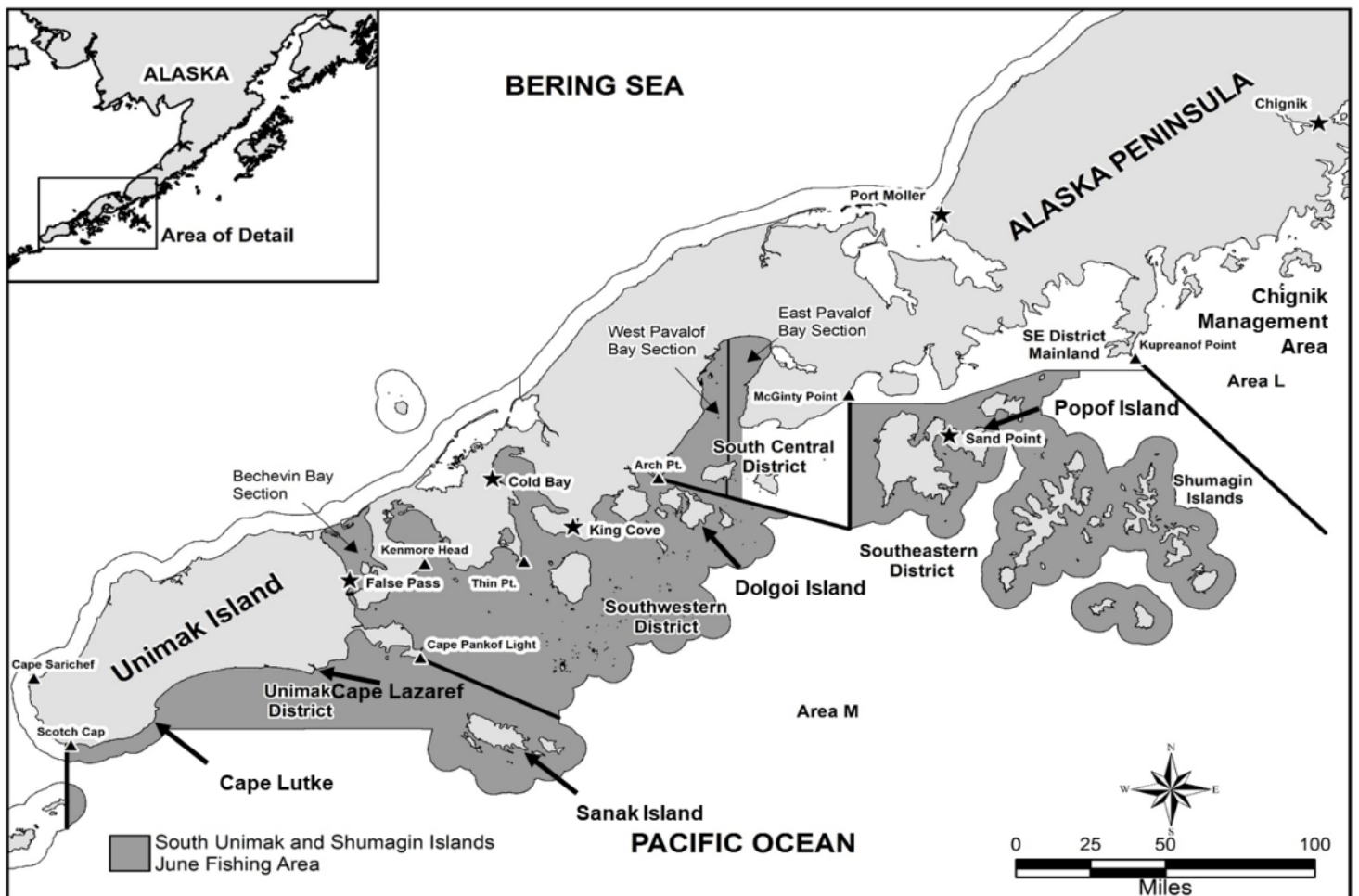


Figure 1.—Map of the South Alaska Peninsula Management area and the locations of the South Unimak and Shumagin Islands June fisheries.

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 2nd 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.
- **2nd 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.