Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

ADF&G Bethel toll free: 1 (855) 933-2433

Meeting Agenda

Date: **06/14/2018** Time: **10:00 a.m.** Place: **Bethel**

Time Called to Order: Chair: Alissa Rogers

ROLL CALL TO ESTABLISH QUORUM:	**QUORUM MET? Yes / No**
Upriver Elder:	**Processor**:
Downriver Elder:	**Member at Large**:
Commercial Fisher:	**Sport Fisher**:
Lower River Subsistence:	**Western Interior RAC**:
Middle River Subsistence:	**Y-K Delta RAC**:
Upper River Subsistence:	**KRITFC:**
Headwaters Subsistence:	**ADF&G**:

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

- Subsistence Reports: Lowest River, OTNC Inseason Subsistence Report, Lower River, Middle River, Upper River, Headwaters
- 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 Project Update:
- Commercial Catch Report: N/A
- Processor Report: N/A
- Sport Fish Report:
- Intercept Fishery Report:
- Weather Forecast:
- Discussion of ADF&G Management considerations and discussion of possible alternatives (recommendations from the Working Group):
- Motion for Discussion and Action:

OLD BUSINESS:

NEW BUSINESS:

COMMENTS FROM WORKING GROUP MEMBERS:

NEXT MEETING DATE:_____Time:_____Place:_____

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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.
Jennifer Peeks
Aaron Tiernan
Working Group Coordinators

Orutsararmiut Traditional Native Council (OTNC) Inseason Harvest Monitoring Weekly Report

June 14, 2018

Summary of Interview Activities

OTNC conducted surveys with 36 fish camps from Tuesday, June 5 through Tuesday, June 12. There were many more active fish camps this survey period compared to the previous week. Five families commented on the high water levels this year. Four families were in support of conservation, two of which expressed their concerns on managers allowing fishery openers this early and with very few fish in the water. A recommendation was made to wait to fish until more Chum and Sockeye salmon are in the river, to prevent more Chinook salmon from being harvested. Seven families commented on restrictions, many of which want more, earlier fishing openers and would like the openers to accommodate fishing during both slack tides. Three families do not want these block openers, and one recommended a permit system. Two families suggested Bethel Test Fishery relocate their fishing site because they are missing a lot of fish. One family requested information on the False Pass reception fishery. Another family requested us to go on KYUK to talk about Salmon life history because he heard reports of Chinook (jack) salmon going back out to the ocean after the enter river.

Chinook Salmon Age-Sex-Length Sampling Program

A total of 26 people expressed interest in participating in the Chinook salmon ASL sampling program and were given sampling supplies.

Fish Distribution

Thus far, we've distributed thirty-seven Chinook salmon to Bethel elders. This is a collaborative effort between OTNC natural resource department, ADF&G and Kuskokwim River Intertribal Fish Commission (KRITFC).

Harvest Summary

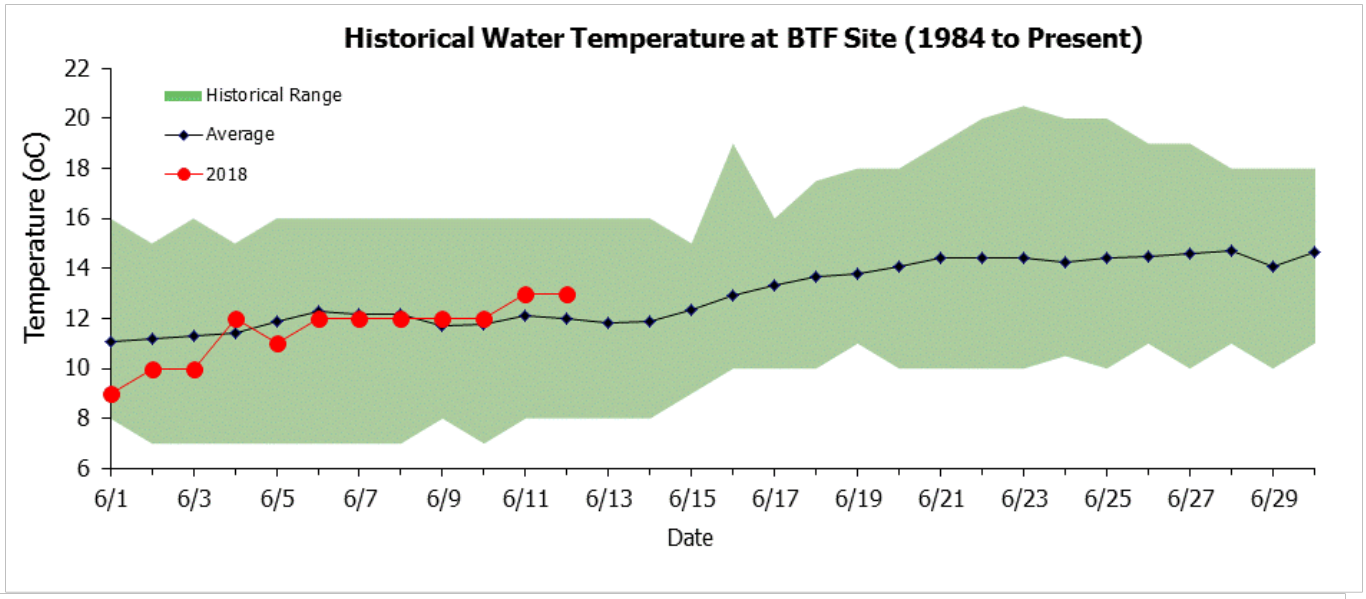
June 12, 2018 Opener

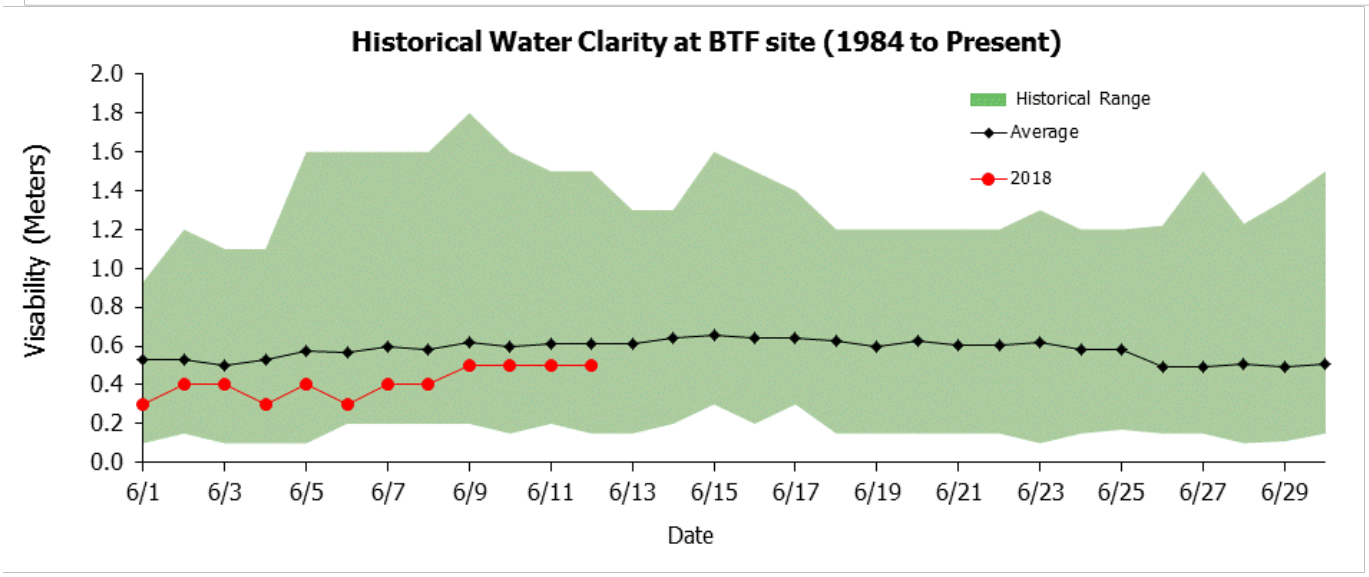
We collected data from 17 unique fishing trips. Most fishing trips occurred as far down river as the Johnson River all the way up to Akiachak. One fishing trip occured below the Johnson River.

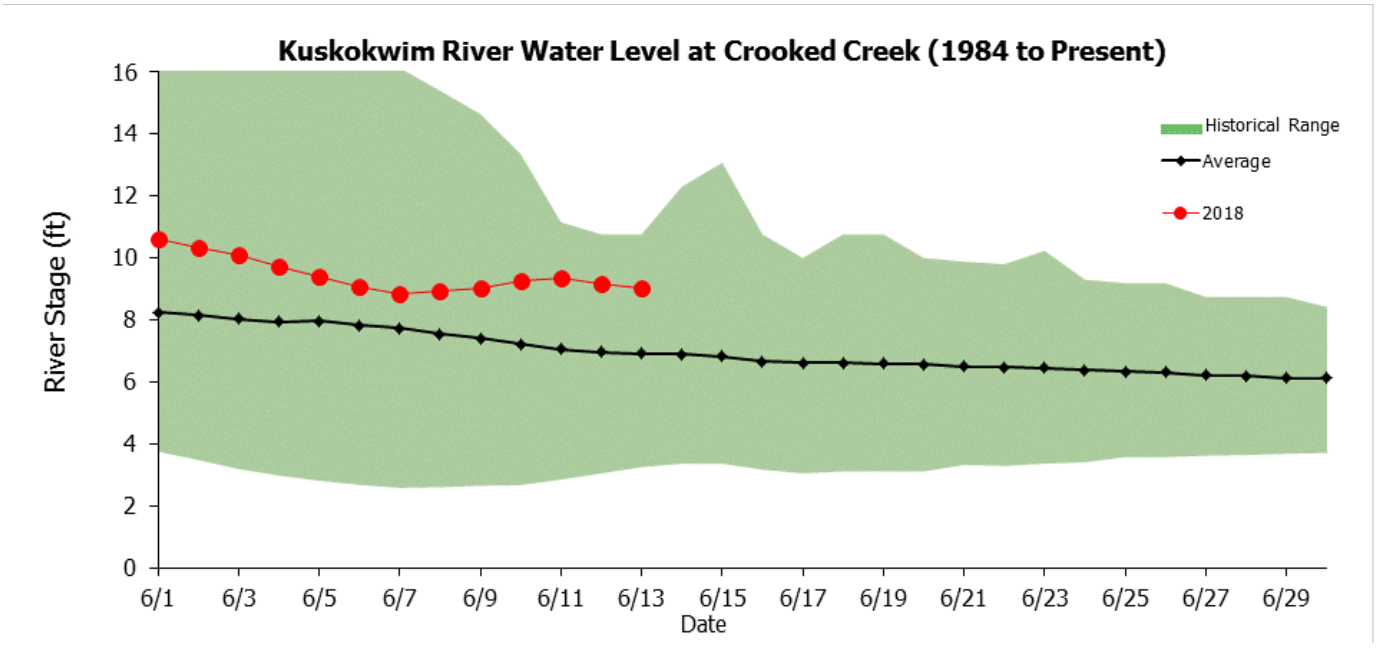
Total Drift Nets	Total Set Nets	Average Soak Time (hours)	Mesh Size Range
15	2	5 hours	5⅜"-6"

Average Chinook Salmon Harvest	Average Chum Salmon Harvest	Average Sockeye Salmon Harvest	Average other harvest
6	2	<1	1

Informational Packet







Informational Packet

Kuskokwim River Salmon Assessment Update
6/12/2018

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 Ben Staton (USFWS; benjamin_staton@fws.gov) or Nick Smith (ADF&G; nick.smith@alaska.gov).

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Abbreviations:

- BTF: Bethel Test Fishery
- ATF: Aniak Test Fishery
- CPUE: Catch-per-unit-effort
- EOS: End-of-Season

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

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

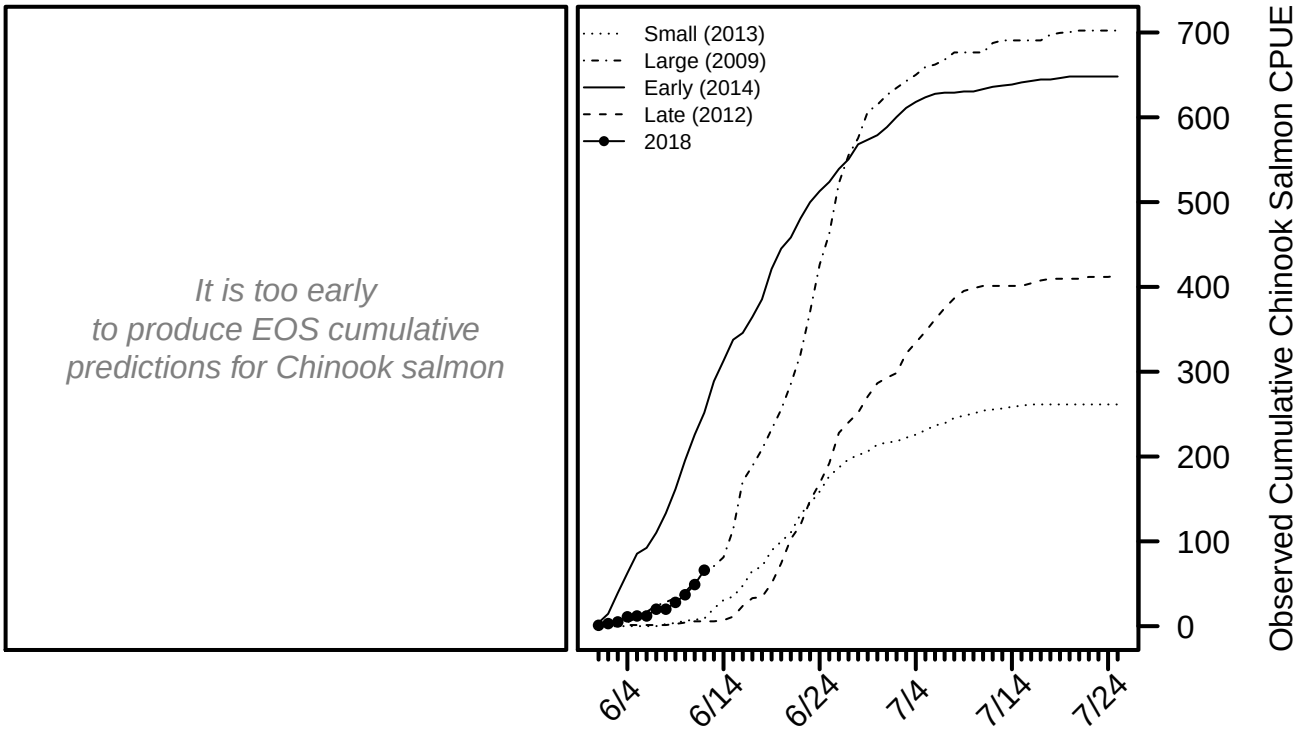
For the most up-to-date information regarding fishing opportunities please visit:

- **USFWS:** https://www.fws.gov/refuge/yukon_delta/wildlife_and_habitat/dailyupdate.html
- **ADF&G:** http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main

Chinook Salmon BTF Summary (6/12)

- The BTF daily CPUE was **17**.
- The BTF cumulative CPUE is now **66**.
- **60%** years since 2008 fell below this cumulative CPUE on this date.
- **12%** of the run is complete based on historical average run timing.
- **7% - 19%** of the run is complete based the central 50% of all historical run timing scenarios.
- **13% - 20%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, Chinook salmon made up **54%** of the BTF catches, compared to **52%** 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 2018 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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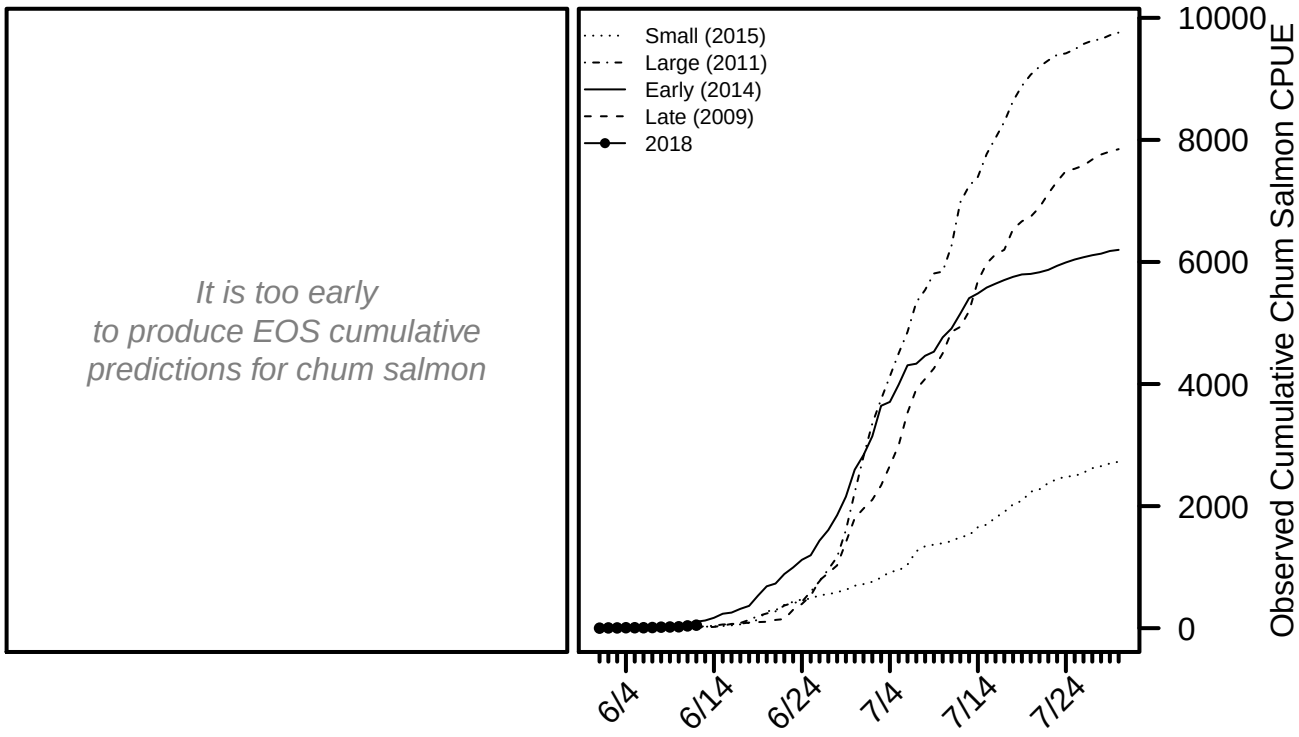
Chum Salmon BTF Summary (6/12)

- The BTF daily CPUE was **12**.
- The BTF cumulative CPUE is now **49**.
- **90%** years since 2008 fell below this cumulative CPUE on this date.
- **1%** of the run is complete based on historical average run timing.
- **<1% - 1%** of the run is complete based the central 50% of all historical run timing scenarios.
- **1% - 4%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **42%** of the BTF catches, compared to **29%** 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 2018 plotted along with four previous years intended to represent a range of early/late and small/large index values.



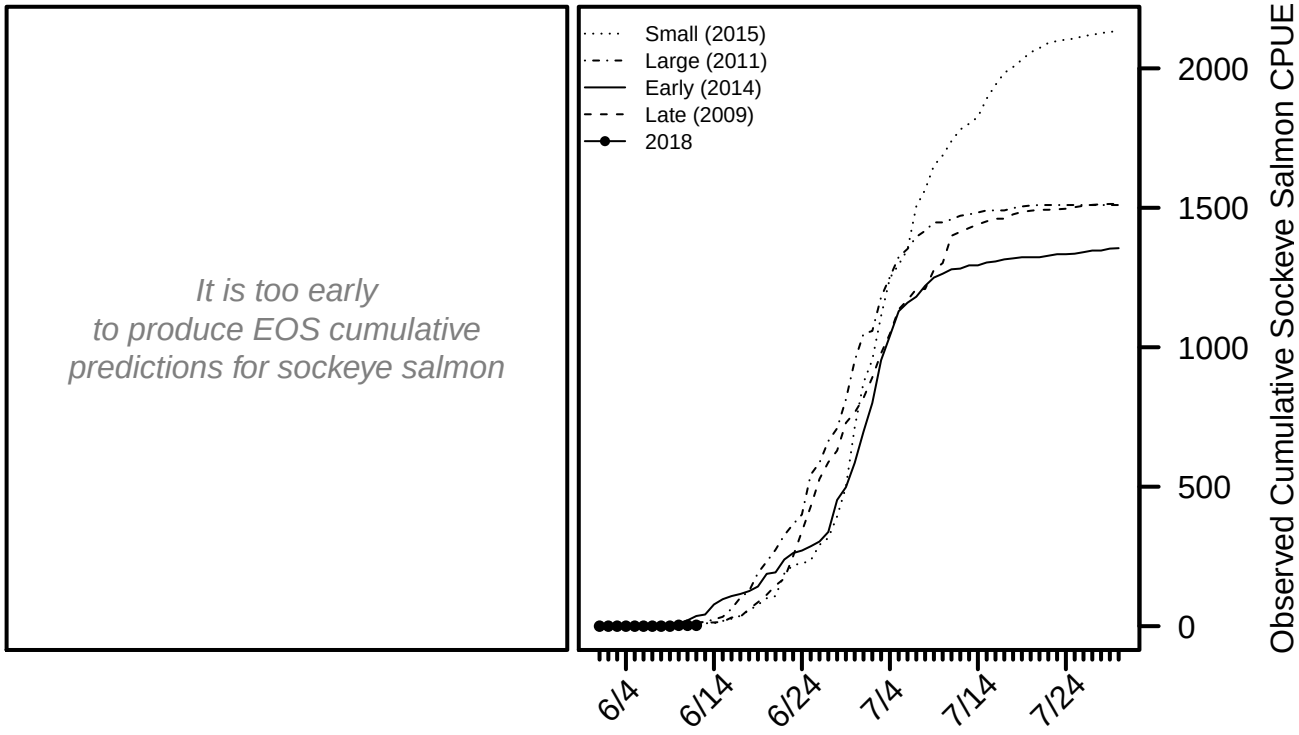
For more detailed information, see the ***chum salmon appendix*** *at the end of this document.*

Informational Packet

Sockeye Salmon BTF Summary (6/12)

- The BTF daily CPUE was **0**.
- The BTF cumulative CPUE is now **3**.
- **60%** years since 2008 fell below this cumulative CPUE on this date.
- **1%** of the run is complete based on historical average run timing.
- **<1% - 2%** of the run is complete based 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 **4%** of the BTF catches, compared to **19%** 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 2018 plotted along with four previous years intended to represent a range of early/late and small/large index values.

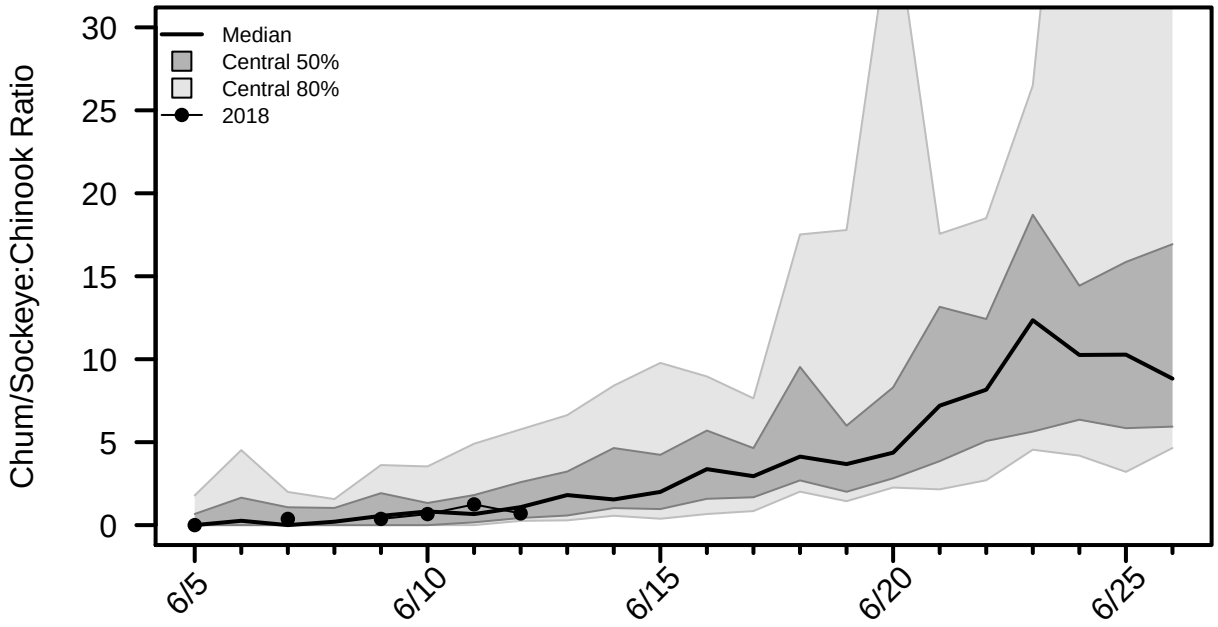


For more detailed information, see the ***sockeye salmon appendix*** *at the end of this document.*

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 in the BTF with historical quantiles shown as grey regions and the ratio time series for 2018 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 and from the sonar.

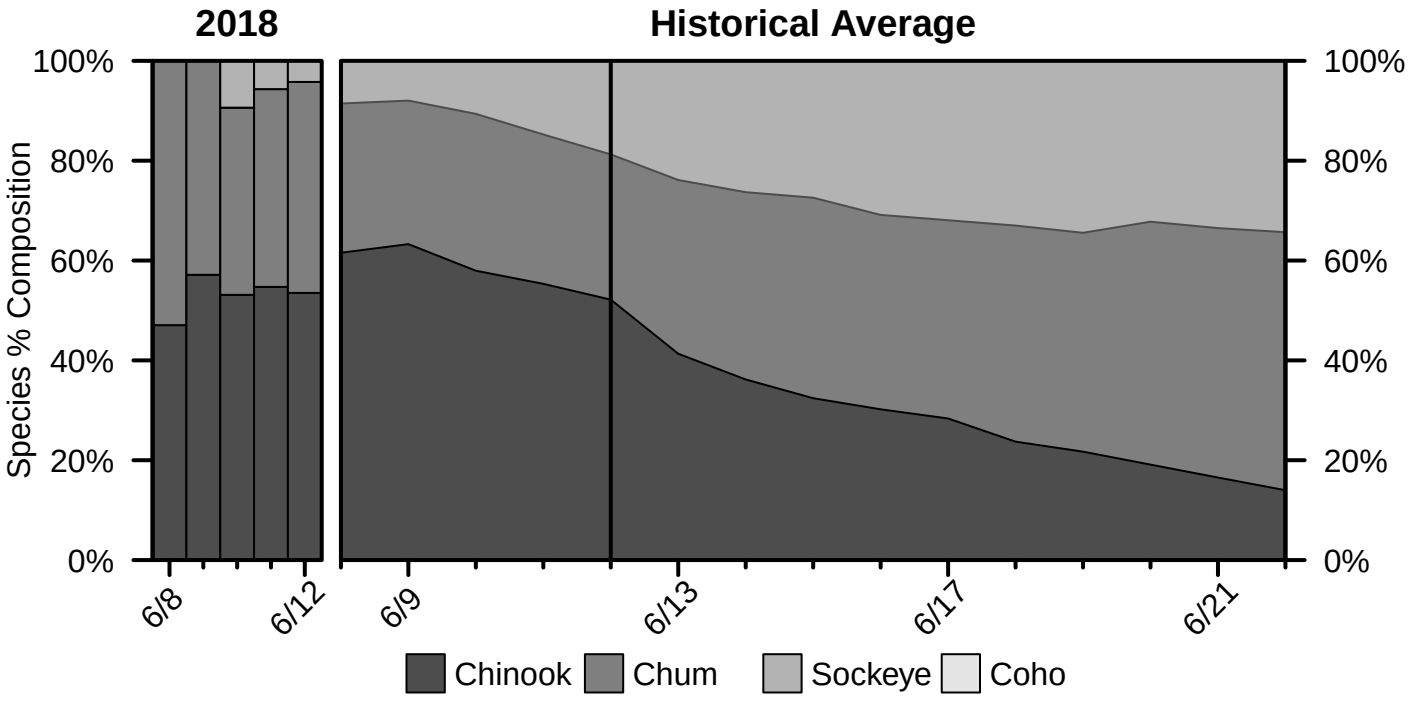
Date	2018 BTF	BTF Median	BTF Lower 10%	BTF Upper 10%	2018 Sonar	2018 ATF
6/9	0.38	0.56	0	3.62	0	0
6/10	0.67	0.82	0	3.54	0	–
6/11	1.25	0.67	0	4.91		0
6/12	**0.71**	**1.08**	**0.26**	**5.77**		**0**
6/13		1.81	0.29	6.63		
6/14		1.55	0.56	8.41		
6/15		2	0.38	9.78		

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

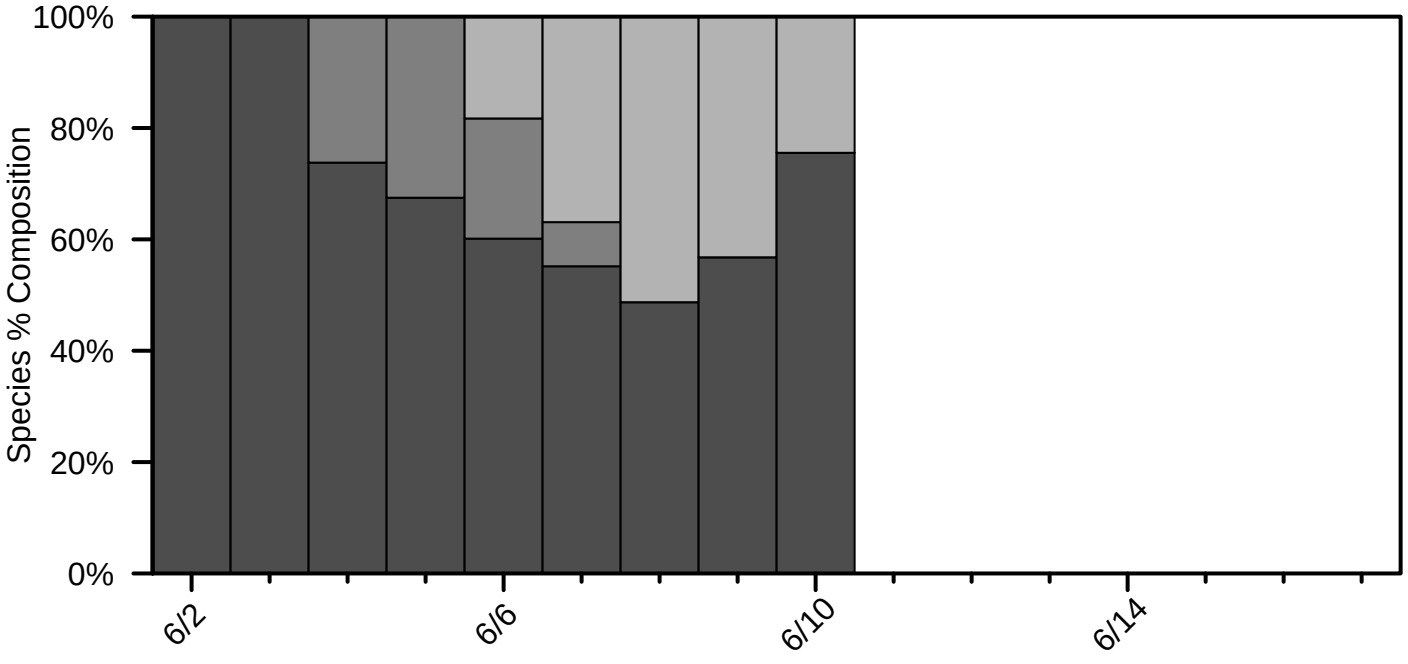
Date	Ratio > 1	Ratio > 3	Ratio > 5	Ratio > 10	Ratio > 20
6/9	71%	29%	9%	3%	3%
6/10	74%	38%	12%	3%	3%
6/11	79%	47%	18%	3%	3%
6/12	**82%**	**47%**	**26%**	**3%**	**3%**
6/13	88%	53%	35%	6%	3%
6/14	91%	68%	44%	9%	3%
6/15	94%	76%	50%	18%	3%

Percent Composition by Salmon Species

Percent Composition Figure 1. Species percent composition in the BTF from 2018 and based on the historical average. The composition presented on each day represents the average composition over the past 3 days.

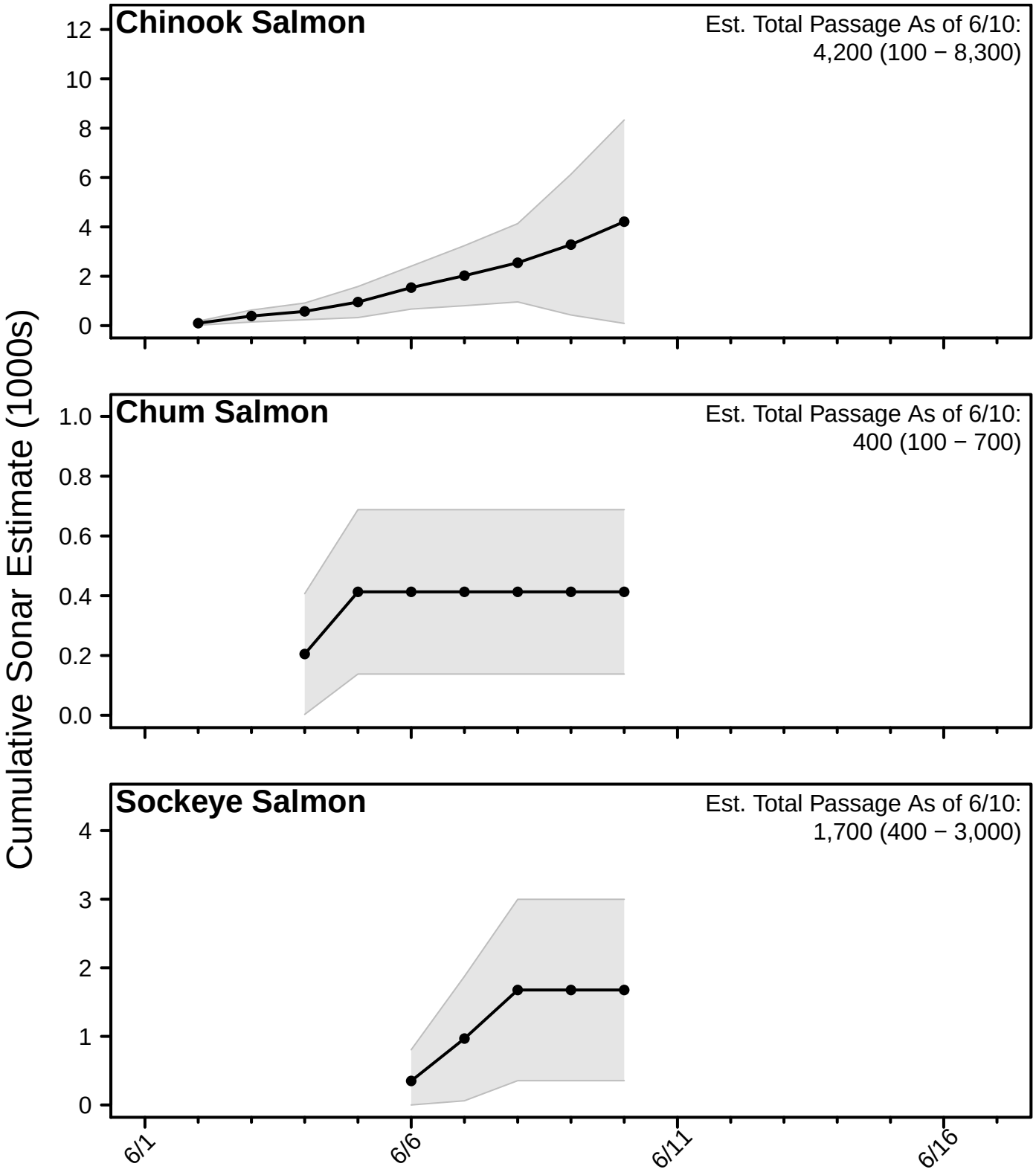


Species Composition Figure 2. Species percent composition from the sonar estimates from 2018 (salmon species only, excluding pink salmon). The composition presented on each day represents the average composition over the past 3 days.



Sonar Passage Estimates

Sonar Figure 1. Cumulative estimates of salmon passage from the 2018 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day.



Chinook Salmon Appendix

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2018	2017	2016	2015	2014	5-Yr Avg.	2008 - 2017 Avg.
6/9	28	9	114	76	162	73	50
6/10	37	12	126	89	195	86	59
6/11	49	18	144	104	226	100	69
6/12	**66**	**21**	**165**	**117**	**252**	**112**	**78**
6/13		23	175	132	289	128	89
6/14		27	196	144	313	142	101
6/15		36	218	164	338	158	120
EOS		374	687	625	650	519	538

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2018	2017	2016	2015
6/9	23	71	466	115
6/10	23	101	589	149
6/11	31	131	659	186
6/12	**64**	**186**	**724**	**256**
6/13		238	731	293
6/14		307	867	382
6/15		451	971	449
EOS		6,508	2,729	2,916

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

Timing	Midpoint	6/12 Cumulative %
Earliest	6/14	39%
Early 10%	6/17	28%
Early 25%	6/21	20%
Median	6/22	12%
Late 25%	6/24	7%
Late 10%	6/27	3%
Latest	7/3	1%

Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2018	2017	2016	2015	2014	5-Yr Avg.	2008 - 2017 Avg.
6/9	19	11	16	18	39	17	12
6/10	22	24	18	18	60	24	17
6/11	37	27	21	18	76	28	20
6/12	**49**	**41**	**21**	**21**	**105**	**38**	**26**
6/13		59	24	24	125	47	34
6/14		65	35	27	169	60	44
6/15		92	42	35	236	84	64
EOS		6,785	3,894	2,943	6,343	5,135	6,525

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2018	2017	2016	2015
6/9	8	24	19	17
6/10	8	31	19	25
6/11	8	61	19	40
6/12	**8**	**91**	**27**	**40**
6/13		98	27	49
6/14		106	49	66
6/15		145	72	66
EOS		11,588	5,304	5,669

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

Timing	Midpoint	6/12 Cumulative %
Earliest	6/23	4%
Early 10%	7/1	2%
Early 25%	7/2	1%
Median	7/5	1%
Late 25%	7/7	<1%
Late 10%	7/11	<1%
Latest	7/14	<1%

Sockeye Salmon Appendix

Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Date	2018	2017	2016	2015	2014	5-Yr Avg.	2008 - 2017 Avg.
6/9	0	0	0	3	0	1	1
6/10	3	0	3	5	10	4	3
6/11	3	0	3	8	21	6	5
6/12	**3**	**3**	**3**	**11**	**36**	**10**	**8**
6/13		3	3	11	42	12	10
6/14		15	5	11	78	23	16
6/15		23	5	19	97	32	26
EOS		2,690	2,463	2,157	1,367	1,965	1,711

Sockeye Salmon Table A2. Cumulative CPUE from the ATF.

Date	2018	2017	2016	2015
6/9	0	0	0	0
6/10	0	0	0	0
6/11	0	0	0	0
6/12	**0**	**0**	**0**	**0**
6/13		0	0	0
6/14		7	0	0
6/15		7	0	0
EOS		393	405	1,245

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

Timing	Midpoint	6/12 Cumulative %
Earliest	6/22	8%
Early 10%	6/24	5%
Early 25%	6/25	2%
Median	6/29	1%
Late 25%	7/1	<1%
Late 10%	7/5	<1%
Latest	7/10	<1%