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: 06/28/2017	Time: 10:00 a.m.	Place: Bethel
Time Called to Order:	Chair: Fritz Charles	
ROLL CALL TO ESTA Upriver Elder: Downriver Elder: Commercial Fisher: Lower River Subsistence: Middle River Subsistence: Upper River Subsistence: Headwaters Subsistence:	ABLISH QUORUM:	QUORUM MET? Yes / No Processor: Member at Large: Sport Fisher: Western Interior RAC: Y-K Delta RAC: KRITFC: ADF&G:
ADF&G MANAGEMEN U.S. FISH & WILDLIFE PEOPLE TO BE HEARI CONTINUING BUSINES	TES: Optional. ADF&G d T ACTIONS UNDER COMMANAGEMENT ACTIONS SS: Lowest River, ONC Inseason wim River salmon run assess hel and Aniak): Recapture/Aerial Surveys/On Project Update: eport: N/A ort: G Management consideration oup):	onsideration: ONSIDERATION: ONSIDERATION: ONS: On Subsistence Report, Lower River, Middle River, Upper River, ssment/ discussion of ADF&G considerations:
OLD BUSINESS:		
NEW BUSINESS:		
COMMENTS FROM WO	ORKING GROUP MEM	IBERS:
NEXT MEETING DATE	: Tim	ne:Place:

Kuskokwim River Salmon Management Working Group ADF&G Bethel toll free: 1 (855) 933-2433

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 Native Council Inseason Harvest Monitoring Weekly Report

ONC Bethel Test Fishery Distribution

As of Sunday, 25 June, 611 fish harvested in the Bethel Test Fishery have been distributed to 182 households/organizations representing Bethel, Kasigluk, Kwethluk, Oscarville, and Atmautluak. Distributions included 98 Chinook salmon, 218 chum salmon, 133 sockeye salmon, 87 sheefish and 75 other fishes (primarily whitefish).

Summary of Interview Activities

ONC has conducted weekly surveys of Bethel Area fish camps since 8 June. So far this season, we have surveyed **66** unique fish camps. From 24 June through 26 June, ONC interviewed 36 fish camps, the survey responses provide general insight into fishing activities during the fishery opener on 24 June.

Summary of Fishing Activities during the 24 June Opener

- 92% of surveyed fish camps (n=33) went out fishing during the recent opener.
- A total of 37 separate fishing trips were conducted by the 33 surveyed fish camps.
- Majority (88%) of the surveyed fish camps conducted one fishing trip during the opener, while the minority (12%) made multiple fishing trips.
- Drift gillnets were the most common gear type used (87%), followed by set gillnets (11%), and one dipnet.
- Gillnet mesh sizes ranged between 5.25 inch and 6.0 inch stretched.
- Most fishing trips (70%) conducted by surveyed fish camps occurred between Napaskiak and Akiachak. The remaining trips were conducted between Napaskiak and the confluence with the Johnson River (19%) and downriver from the confluence with the Johnson River (11%). No survey respondents fished upriver from Akiachak.

Table 1. Average number of salmon harvested by surveyed fish camps on 24 June

Species	Chinook Salmon	Chum Salmon	Sockeye Salmon
Average Number of Fish Harvested	8	41	17

The information above includes data obtained from 37 unique fishing trips.

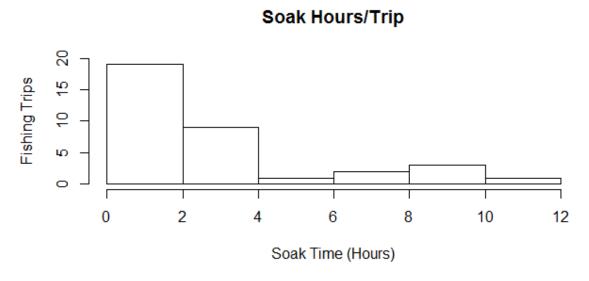
Table 2. Average Catch-Per-Unit-Effort (CPUE) for the surveyed fish camps that fished on 24 June

Species	Chinook Salmon	Chum Salmon	Sockeye Salmon
Average CPUE	5	28	11

Numbers represent the expected catch using a 150 foot net for one hour.

Orutsararmiut Native Council Inseason Harvest Monitoring Weekly Report

Figure 1. Distribution of soak time for 37 unique fishing trips.



 $Median\ soak\ time = 2\ hours$

Table 3. Fishing Progress for 33 fish camps surveyed between 24 June and 26 June We asked fish camps about their progress for meeting their subsistence salmon harvest goals.

Salmon	Less Than Half	Halfway	More than Half/Met	Total
Species				N
Chinook	76%	14%	7%	28
salmon				
Chum salmon	21%	14%	65%	29
Sockeye	42%	41%	17%	29
salmon				

Summary of Comments

Comments listed below were provided to us during and after the 24 June opener. Five fish camps indicated that they were grateful for the opener and the opportunity to catch more fish. Two fish camps reported that they had no goals for Chinook salmon; one fish camp does not target Chinook salmon and the other fish camp was happy for whatever Chinook salmon they can harvest. Two fish camps commented on restrictions; one fish camp stated the allowable mesh size was too small and the other fish camp stated it was too late to provide an opportunity to harvest Chinook because the Chinook salmon had already moved upriver. Another fish camp reported that with current restrictions, they were attempting to put more fish away this season, to sustain them through next season. Two fish camps commented that there wasn't enough notice before the opener and they didn't have a chance to go fishing; one of which didn't know where to find information on the 24 June opener.

Total Catch for Lower Kuskokwim River Tagging					
Date	Chinook	Sockeye	Chum		
5/26/2017	1	0	0		
5/27/2017	0	0	0		
5/28/2017	1	0	0		
5/29/2017	0	0	0		
5/30/2017	0	0	0		
5/31/2017	0	0	0		
6/1/2017	1	0	0		
6/2/2017	1	0	0		
6/3/2017	1	0	0		
6/4/2017	1	0	0		
6/5/2017	7	0	0		
6/6/2017	3	0	0		
6/7/2017	13	0	1		
6/8/2017	9	0	0		
6/9/2017	4	0	0		
6/10/2017	8	0	1		
6/11/2017	9	0	1		
6/12/2017	12	0	0		
6/13/2017	5	0	0		
6/14/2017	15	1	0		
6/15/2017	9	0	0		
6/16/2017	9	1	0		
6/17/2017	16	1	0		
6/18/2017	20	0	3		
6/19/2017	24	2	3		
6/20/2017	28	0	8		
6/21/2017	18	1	9		
6/22/2017	24	4	10		
6/23/2017	28	3	9		
6/24/2017	14	3	16		
6/25/2017	27	2	8		
Totals	308	18	69		
Note- All fish were	caught using 7.5" a	lrift gillnets.			

Kuskokwim River Salmon Assessment Update: 6/26/2017





This document presents the key assessment information considered by managers in-season. The production of this document is a collaborative effort between the ADF&G and USFWS. 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 Zachary Liller (ADF&G; zachary.liller@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

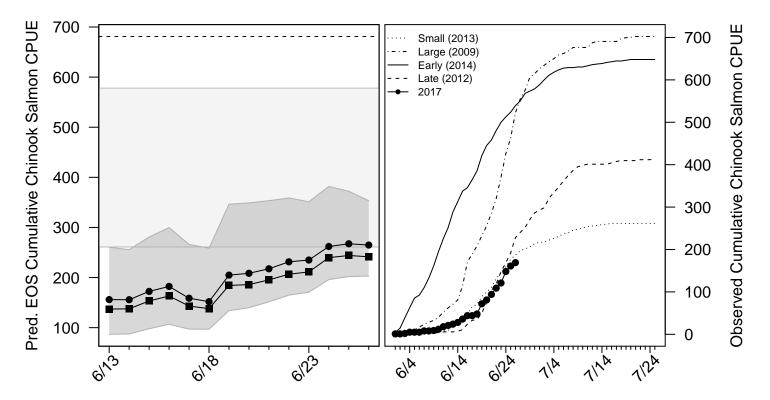
For the most up-to-date information regarding fishing opportunities please visit:

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

Chinook Salmon (6/26)

- The BTF daily CPUE was 8.
- The BTF cumulative CPUE is 169.
- **0** years since 2008 (**0%**) fell below this cumulative CPUE.
- 64% of the run is complete based on historical average run timing.
- 70% of the run is complete based on a slightly early-to-average official run timing forecast.
- Late run scenarios are considered highly unlikely at this time due to the timing forecast.
- 9 18% of the run is expected to pass in the next 5 days.
- Over the last 3 days, Chinook salmon made up 9% of the BTF catches, compared to 10% on average.

Chinook Salmon Figure 1. *Left*: predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (dark grey region), historical median (circles), and the forecasted run timing (squares). The light grey region shows the range of EOS values from 2010 - 2013, which indexed run sizes past Bethel ranging from 66,000 to 102,000. The dashed horizontal line shows the EOS value from 2016. *Right*: The cumulative BTF CPUE from 2017 plotted along with four previous years intended to represent a range of early/late and small/large index values.

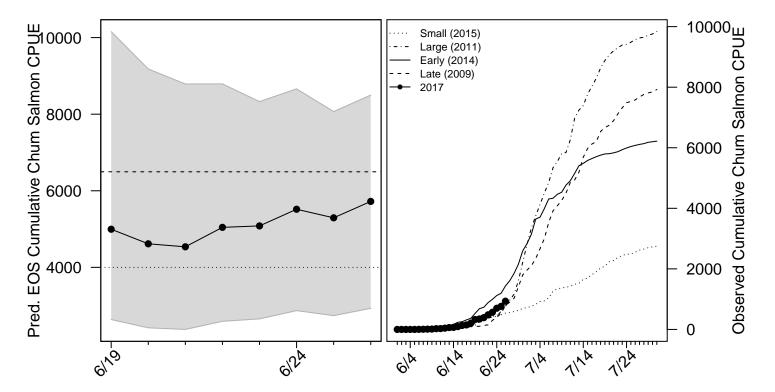


For more detailed information, see the Chinook salmon appendix at the end of this document.

Chum Salmon (6/26)

- The BTF daily CPUE was 170.
- The BTF cumulative CPUE is **932**.
- 6 years since 2008 (67%) fell below this cumulative CPUE.
- 16% of the run is complete based on historical average run timing.
- No run timing forecast is available for chum salmon.
- 12 18% of the run is expected to pass in the next 5 days.
- Over the last 3 days, chum salmon made up 70% of the BTF catches, compared to 55% on average.

Chum Figure 1. Left: predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (grey region) and historical median (circles). The dotted horizontal line shows the EOS value above which the escapement goal at Kogrukluk has always been met historically. The dashed horizontal line shows the average since 2008. Right: The cumulative BTF CPUE from 2017 plotted along with four years intended to represent a range of early/late and small/large index values.

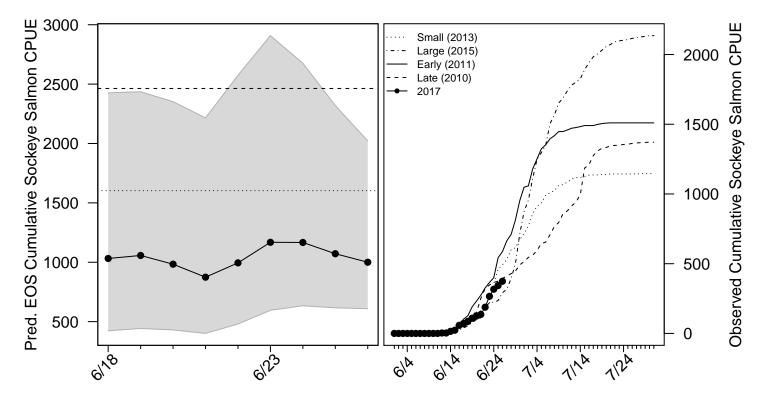


For more detailed information, see the chum salmon appendix at the end of this document.

Sockeye Salmon (6/26)

- The BTF daily CPUE was **31**.
- The BTF cumulative CPUE is **374**.
- 4 years since 2008 (44%) fell below this cumulative CPUE.
- 37% of the run is complete based on historical average run timing.
- No run timing forecast is available for sockeye salmon.
- 24 29% of the run is expected to pass in the next 5 days.
- Over the last 3 days, sockeye salmon made up 21% of the BTF catches, compared to 35% on average.

Sockeye Figure 1. Left: predicted cumulative EOS BTF CPUE according to various run timing scenarios: central 80% (grey region) and the historical median. The dashed horizontal line shows the EOS value from 2016 and the dotted horizontal line shows the average since 2008. Right: The cumulative BTF CPUE from 2017 plotted along with four years intended to represent a range of early/late and small/large index values.

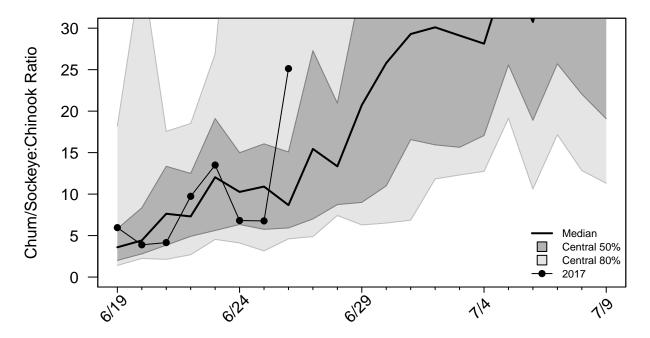


For more detailed information, see the sockeye salmon appendix at the end of this document.

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. A value of zero indicates Chinook salmon were counted, but not chum or sockeye salmon. A missing value on a day the project operated indicates no Chinook salmon were counted.

Ratio Figure 1. Time series of the species ratio with historical quantiles shown as grey regions and the ratio time series for 2017 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 sonar project and ATF.

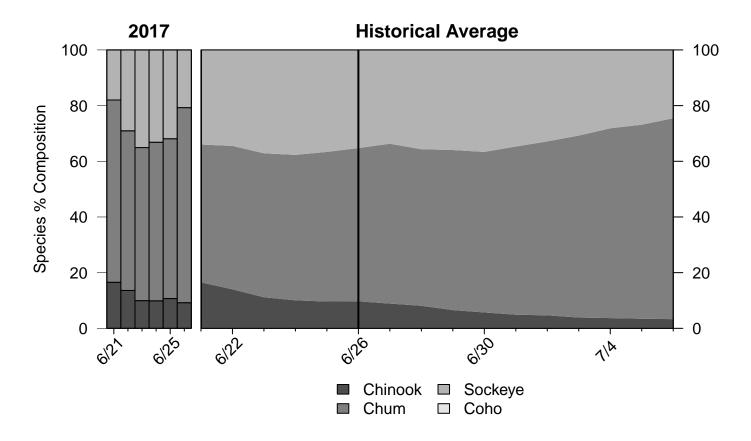
Date	2017 BTF	BTF Median	BTF Lower 10%	BTF Upper 10%	2017 Sonar	2017 ATF
${6/23}$	13.5	12.03	4.54	26.9	3.8	0.55
6/24	6.81	10.26	4.12	58.04	9.61	1.22
6/25	6.77	10.91	3.15	45.96	4.45	1.01
6/26	25.12	8.67	4.61	35		1.27
6/27		15.44	4.88	50.4		
6/28		13.35	7.42	31.31		
6/29		20.73	6.28	58.12		

Ratio Table 2. The probability that a given species ratio will be exceeded by a certain day in the BTF (calculated based on all previous years: 1984 - 2016).

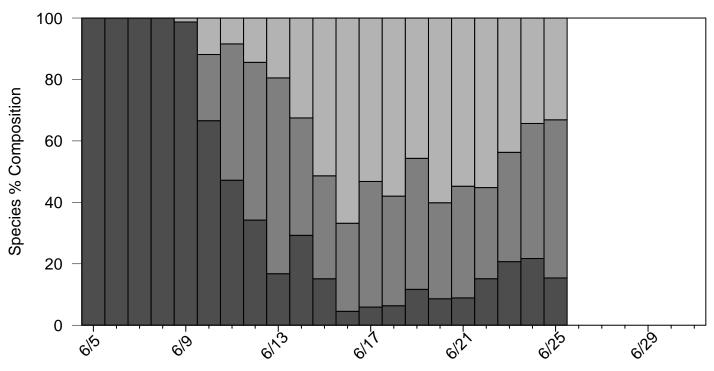
Date	Ratio > 5	Ratio > 10	Ratio > 20	Ratio > 30	Ratio > 40
6/23	0.97	0.7	0.36	0.21	0.15
6/24	0.97	0.79	0.42	0.27	0.24
6/25	1	0.88	0.45	0.3	0.27
6/26	1	0.91	0.45	0.3	0.27
6/27	1	0.91	0.58	0.39	0.33
6/28	1	0.94	0.67	0.42	0.36
6/29	1	0.97	0.76	0.58	0.48

Species Composition

Species Composition Figure 1. Species percent composition in the BTF from 2017 and based on historical average. The composition presented on each day represents the average composition over the past 3 days.

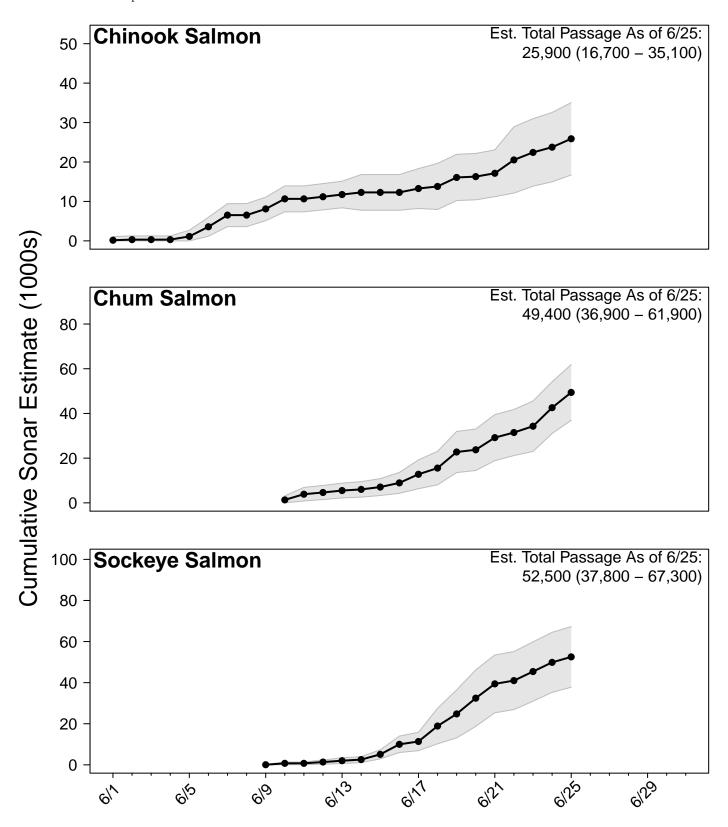


Species Composition Figure 2. Species percent composition from the sonar estimates from 2017 (salmon species only, excluding pinks). The composition presented on each day represents the average composition over the past 3 days.



Sonar

Sonar Figure 1. Cumulative estimates of salmon passage from the 2017 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day. The sonar project began partial operations on June 1 and full operations on June 3.



Chinook Salmon Appendix

Chinook Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
	121	357	336	500	145	297	305
6/24	148	378	345	513	159	313	325
6/25	161	400	347	524	177	328	342
6/26	169	432	366	539	187	351	370
6/27		454	372	550	197	363	385
6/28		463	387	568	202	374	398
6/29		484	405	573	206	388	416
ÉOS		687	625	650	261	528	557

Chinook Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
6/23	1,481	1,435	1,619
6/24	1,645	1,470	1,716
6/25	1,945	1,514	1,884
6/26	$2,\!165$	$1,\!564$	2,008
6/27		1,657	2,169
6/28		1,763	2,187
6/29		1,857	2,228
EOS		2,729	2,916

Chinook Salmon Table A3. Percent of run complete according to various historical run timing scenarios and the preliminary 2017 run timing forecast (with forecast uncertainty).

Timing	Historical Midpoint	Historical 6/26 Cumulative %	Forecasted Midpoint	Forecasted 6/26 Cumulative %
Earliest	6/15	91%	6/16	89%
Early 10%	6/18	83%	6/18	83%
Early 25%	6/21	71%	6/19	77%
Median	6/23	64%	6/21	69%
Late 25%	6/24	58%	6/23	61%
Late 10%	6/26	48%	6/25	53%
Latest	7/3	16%	6/27	44%

Chum Salmon Appendix

Chum Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
${6/23}$	567	283	431	994	511	585	558
6/24	700	353	471	1,120	669	682	649
6/25	762	393	482	1,194	805	773	757
6/26	$\bf 932$	460	541	1,434	881	885	897
6/27		541	554	1,608	979	1,014	1,042
6/28		602	590	1,851	1,007	1,109	1,161
6/29		724	628	$2{,}155$	1,020	1,266	1,362
ÉOS		3,894	2,943	6,343	5,708	5,156	6,496

Chum Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
	728	229	240
6/24	927	307	390
6/25	1,214	456	467
6/26	$1,\!494$	563	649
6/27		649	772
6/28		958	810
6/29		1,124	877
EOS		5,304	5,669

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

		6/26 Cumulative
Timing	Midpoint	%
Earliest	6/24	58%
Early 10%	7/1	32%
Early 25%	7/3	25%
Median	7/6	16%
${\bf Late} {\bf 25\%}$	7/7	13%
${\bf Late} {\bf 10\%}$	7/10	11%
Latest	7/12	6%

Sockeye Salmon Appendix

Sockeye Salmon Table A1. Cumulative CPUE from the BTF.

Date	2017	2016	2015	2014	2013	5-Yr Avg.	2008 - 2016 Avg.
6/23	266	103	219	262	213	189	248
6/24	317	120	225	271	358	234	295
6/25	343	142	236	286	461	270	350
6/26	374	236	292	303	492	319	$\boldsymbol{402}$
6/27		279	316	338	531	359	448
6/28		291	393	452	601	421	499
6/29		319	499	498	614	479	560
EOS		2,463	$2,\!157$	1,367	1,146	1,661	1,603

Sockeye Salmon Table A2. Cumulative CPUE from the ATF.

Date	2017	2016	2015
6/23	67	0	0
6/24	67	0	0
6/25	83	8	17
6/26	83	8	42
6/27		8	120
6/28		26	129
6/29		26	145
\mathbf{EOS}		405	1,245

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

		6/26 Cumulative
Timing	Midpoint	%
Earliest	6/23	67%
Early 10%	6/24	61%
Early 25%	6/26	52%
Median	6/28	37%
Late 25%	6/30	26%
Late 10%	7/3	18%
Latest	7/11	11%

Subsistence Division Update to the Working Group, 06/28/2017

Fishing opener statistics June 24

Sample fishers Nunapitchuk, Napakiak, Napaskiak, Oscarville, Bethel Kwethluk River Y to mouth of Lomavik Slough

Table 1

Sample harvest amounts	
n fishers	20
Sample Chinook harvest	101
Sample chum harvest	922
Sample sockeye harvest	237
Sample (chum+sockeye) harvest	1,159
Sample all salmon harvest	1,260

Table 2

UPDATED TABLE 2

Sample catch rates (150 ft net fished for 1 hr)	
n fishers	20
Total drifts recorded	81
Avg total fishing time/fisher	2:42
Avg fisher CPUE Chinook	1.77
Avg fisher CPUE chum	16.11
Avg fisher CPUE sockeye	4.14
Avg fisher CPUE chum+sockeye	20.26
Avg fisher CPUE all salmon	22.02

Table 3

Average sample harvests	
Avg Chinook harvest/fisher	5.05
Avg chum harvest/fisher	46
Avg sockeye harvest/fisher	11.85
Avg (chum+sockeye) harvest/fisher	57.95
Avg sockeye harvest/fisher	63

Table 4

Estimated harvest all boats June 24 KWT-Y of Lomavik Slough	95% CI		
Total boats			
Est. total harvest Chinook	949		
Est. total harvest chum	8,667		
Est. total harvest sockeye	2,228		
Est. total harvest (chum+sockeye)	10,895		
Est. total harvest all salmon	11,844		

Supplemental Kuskokwim River Salmon Escapement Data

Salmon escapement projects are located upriver from where the majority of salmon harvest occurs. As such, escapement data provide limited information about the status of salmon runs in season. Data from escapement projects are primarily used post season to assess escapement goals and trends.

Daily escapement information can be viewed online at the ADF&G Kuskokwim Management Area Fish Counts webpage. This can be accessed through the following link: http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts

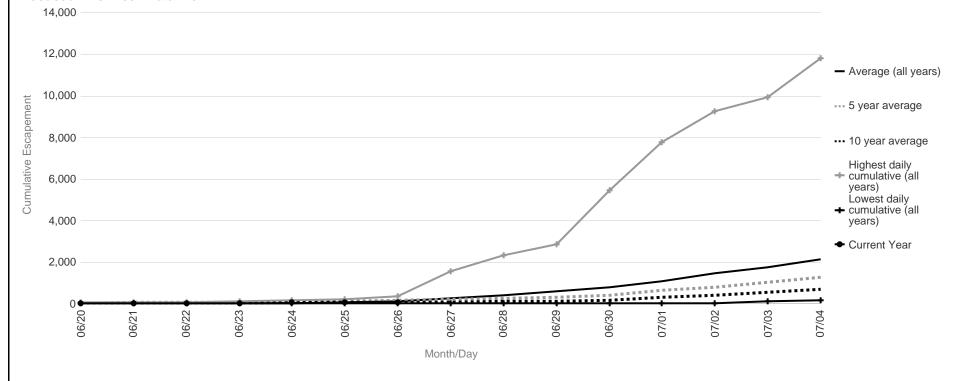
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,100 to 7,500

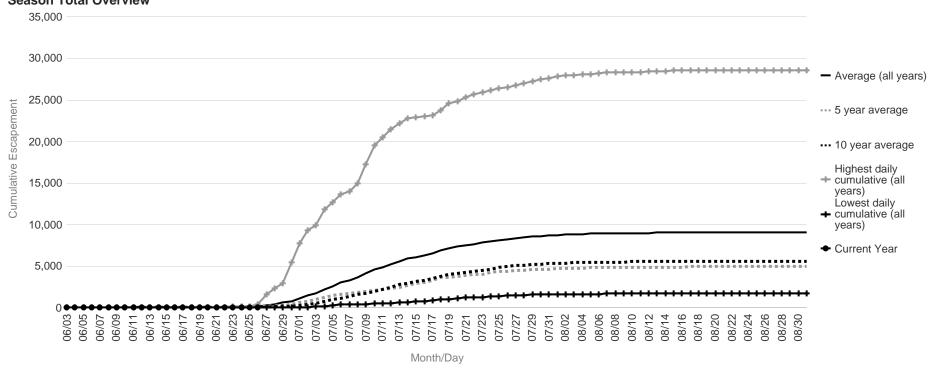
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	8	22	11	44	9
06/21	0	13	36	18	72	10
06/22	0	9	39	20	78	11
06/23	0	14	47	24	93	18
06/24	0	23	66	34	132	34
06/25	0	38	106	44	188	54
06/26	0	93	173	72	327	64
06/27	0	236	185	79	1,528	
06/28	0	398	253	112	2,322	
06/29	2	580	318	128	2,860	
06/30	8	779	380	168	5,460	
07/01	18	1,074	620	278	7,774	
07/02	32	1,430	787	386	9,257	
07/03	81	1,749	1,020	527	9,951	
07/04	135	2,141	1,280	704	11,804	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,668	9,073	4,968	5,575	28,605







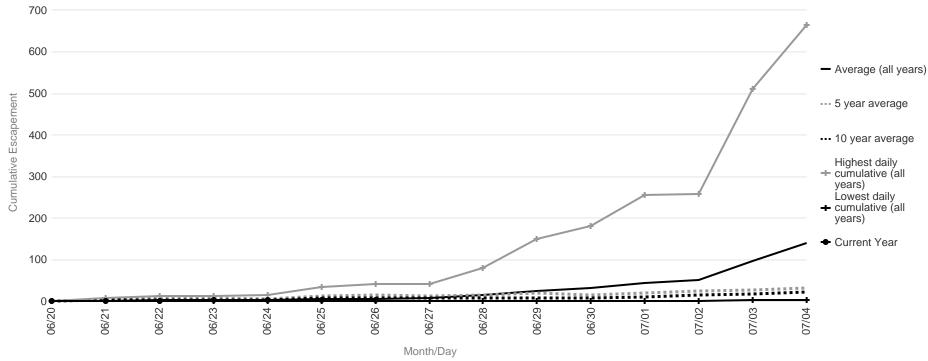


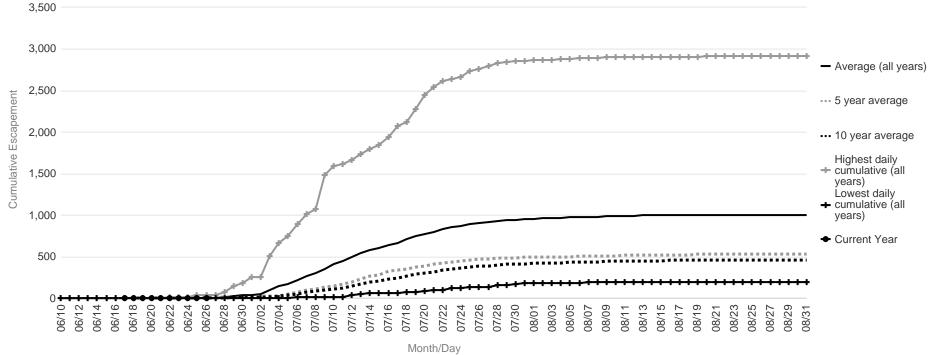
Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

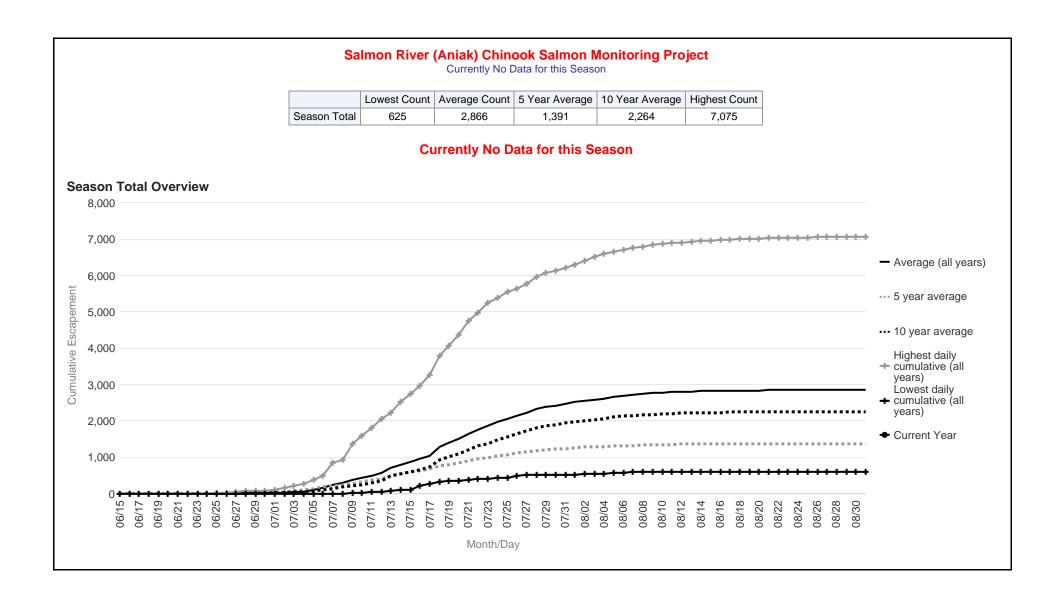
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	0	0	0	0	0
06/21	0	1	4	2	8	1
06/22	0	2	7	4	12	1
06/23	0	2	8	4	13	3
06/24	0	2	6	4	15	4
06/25	0	4	12	7	33	4
06/26	0	5	15	7	41	4
06/27	0	7	13	7	42	
06/28	0	14	14	7	80	
06/29	0	25	19	8	149	
06/30	0	33	16	8	180	
07/01	0	43	19	10	255	
07/02	0	52	24	15	259	
07/03	2	96	27	17	511	
07/04	3	141	31	22	665	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	193	1,005	538	461	2,918

Focused Two-Week Data View





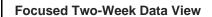


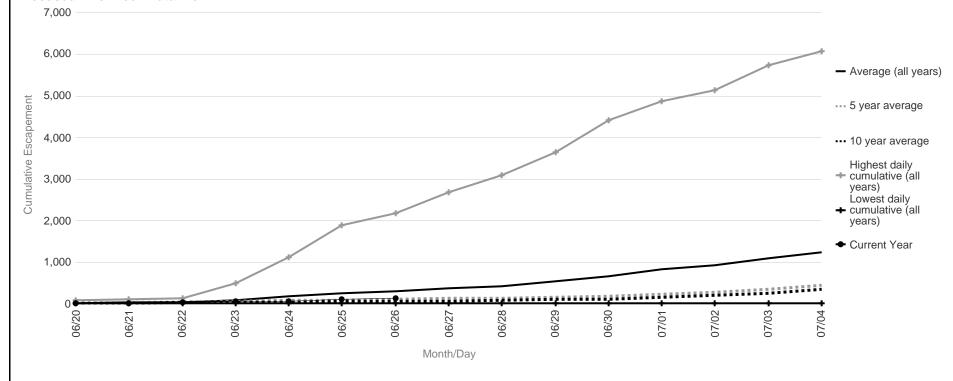
George River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 1,800 to 3,300

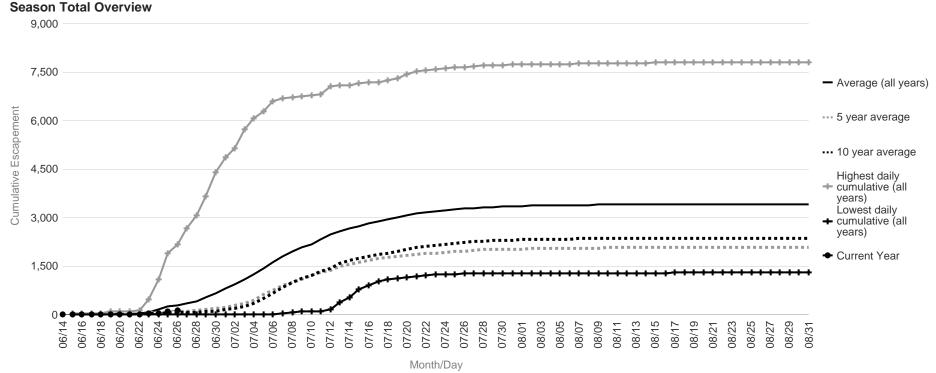
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	13	9	6	87	7
06/21	0	18	18	10	104	7
06/22	0	32	29	16	122	18
06/23	0	80	52	28	484	41
06/24	1	164	66	36	1,104	49
06/25	3	241	79	43	1,879	93
06/26	3	282	107	59	2,167	117
06/27	10	358	112	63	2,681	
06/28	10	419	127	71	3,078	
06/29	11	540	156	90	3,644	
06/30	11	657	176	110	4,411	
07/01	11	820	214	148	4,867	
07/02	11	931	278	199	5,144	
07/03	11	1,077	340	251	5,728	
07/04	12	1,231	429	338	6,075	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,292	3,426	2,086	2,371	7,810









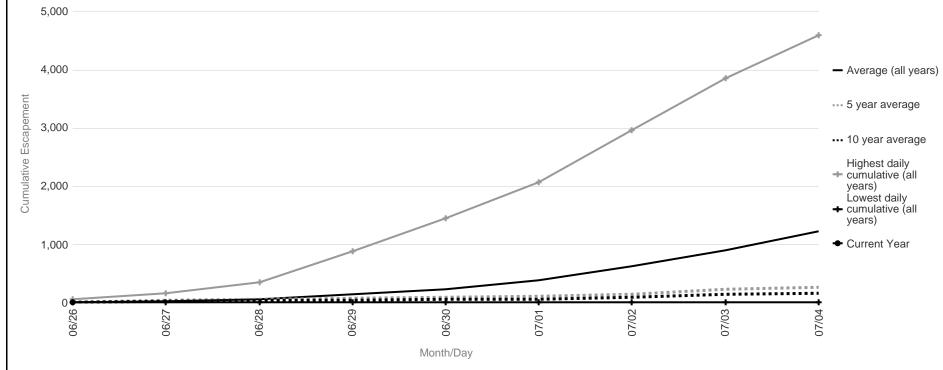
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

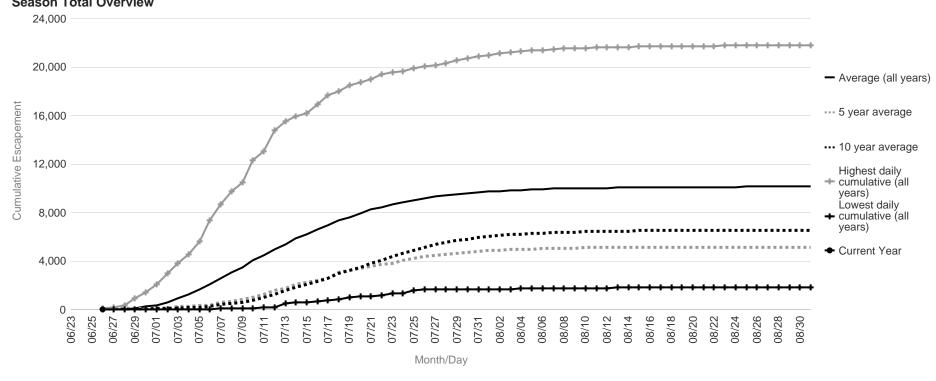
Escapement Goal Range: 4,800 to 8,800

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/26	0	5	6	3	58	1
06/27	0	20	30	15	159	
06/28	0	50	56	29	353	
06/29	0	135	69	37	886	
06/30	0	228	86	48	1,448	
07/01	0	378	104	60	2,065	
07/02	0	614	133	81	2,969	
07/03	0	904	227	134	3,848	
07/04	1	1,221	264	161	4,588	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,819	10,139	5,172	6,564	21,819





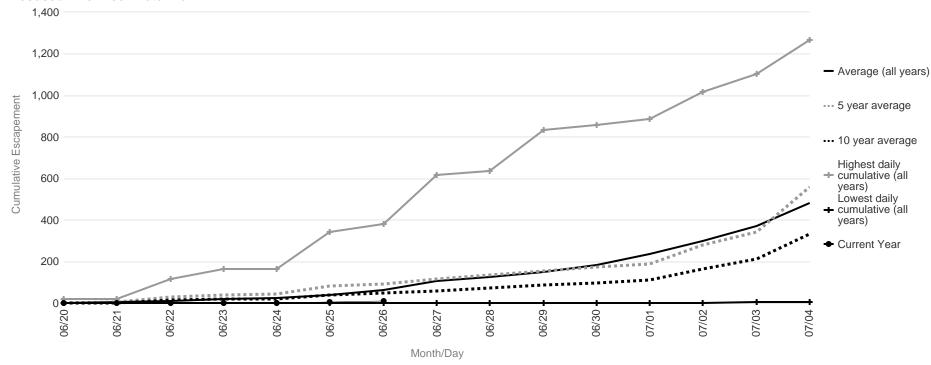


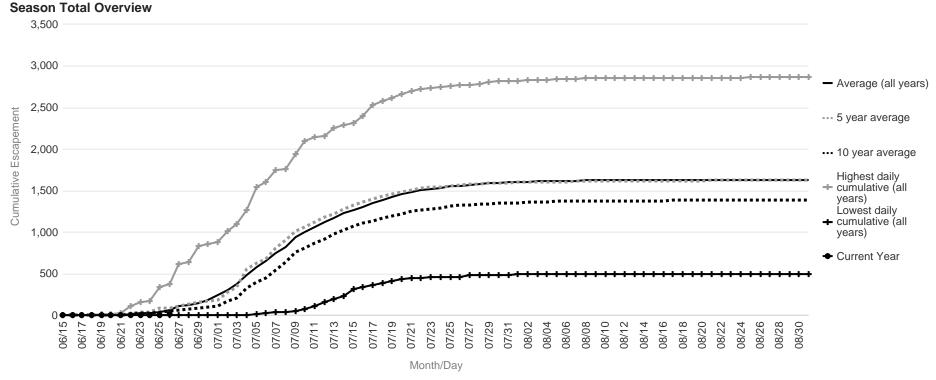
Tatlawiksuk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

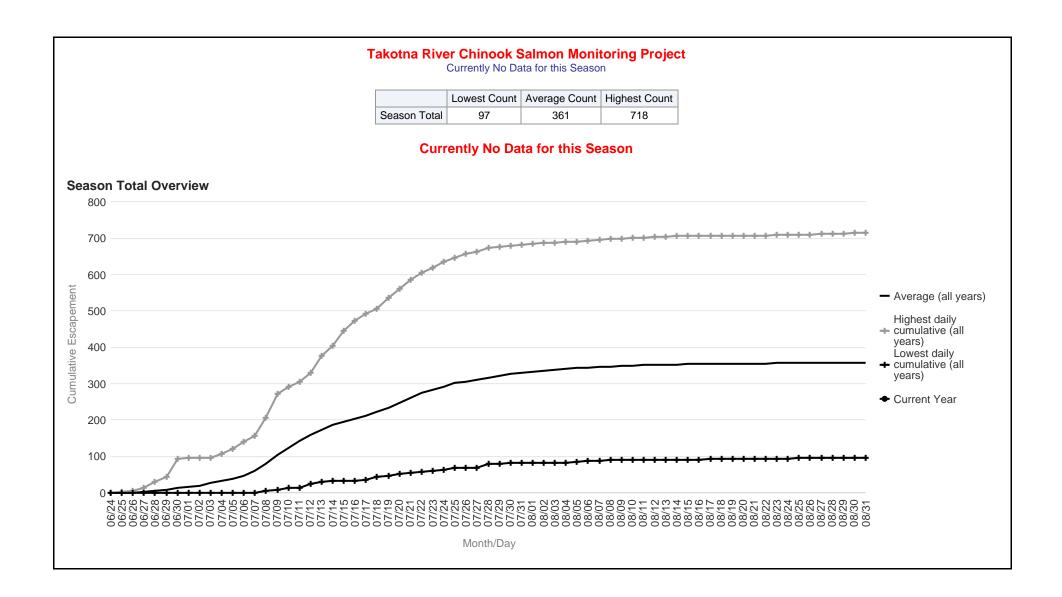
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	2	2	1	19	1
06/21	0	3	3	2	21	2
06/22	0	12	28	15	116	2
06/23	0	20	40	21	163	3
06/24	0	23	43	22	166	3
06/25	0	40	81	41	344	8
06/26	1	66	90	47	381	11
06/27	1	108	114	60	617	
06/28	1	126	135	73	638	
06/29	2	151	155	86	833	
06/30	2	183	175	97	858	
07/01	2	239	189	114	886	
07/02	3	298	279	166	1,017	
07/03	4	370	345	211	1,103	
07/04	7	485	558	332	1,268	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	495	1,631	1,623	1,383	2,864

Focused Two-Week Data View





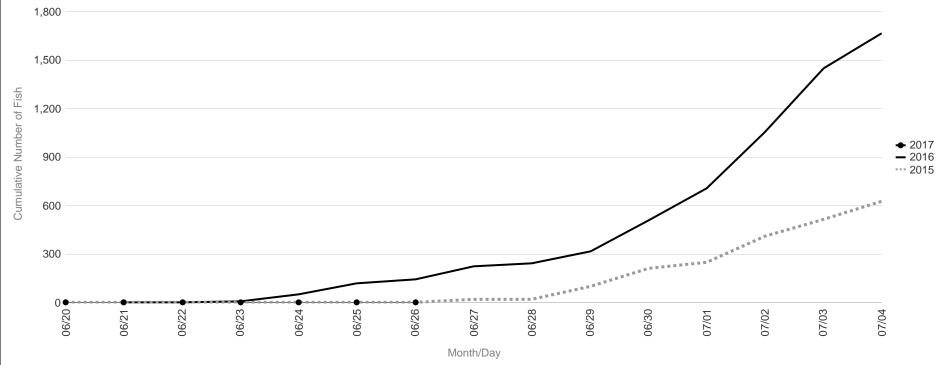


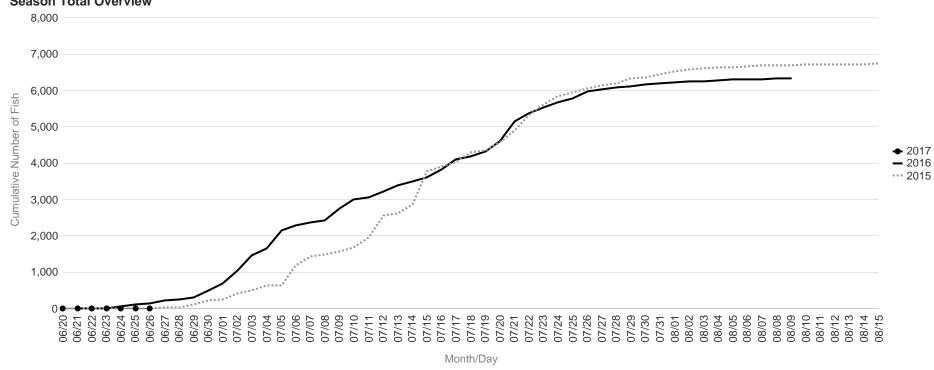
Salmon River (Pitka Fork) Salmon Monitoring Project **Cumulative Daily Passage of Chinook Salmon**

	Cumula	ative Daily F	assage
Date	2015	2016	2017
06/20	0		0
06/21	0	1	0
06/22	0	3	0
06/23	0	7	0
06/24	0	50	0
06/25	0	119	0
06/26	0	142	0
06/27	19	223	
06/28	20	245	
06/29	101	318	
06/30	212	508	
07/01	247	704	
07/02	411	1,052	
07/03	513	1,450	
07/04	629	1,668	

	2015	2016
Season Total	6,736	6,326

Focused Two-Week Data View



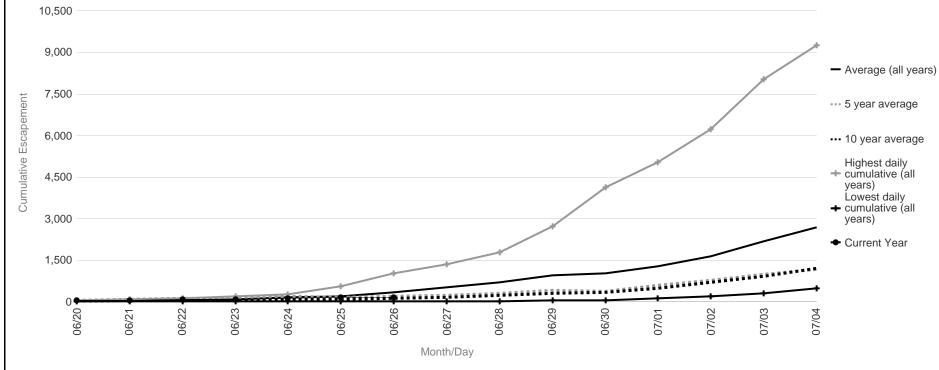


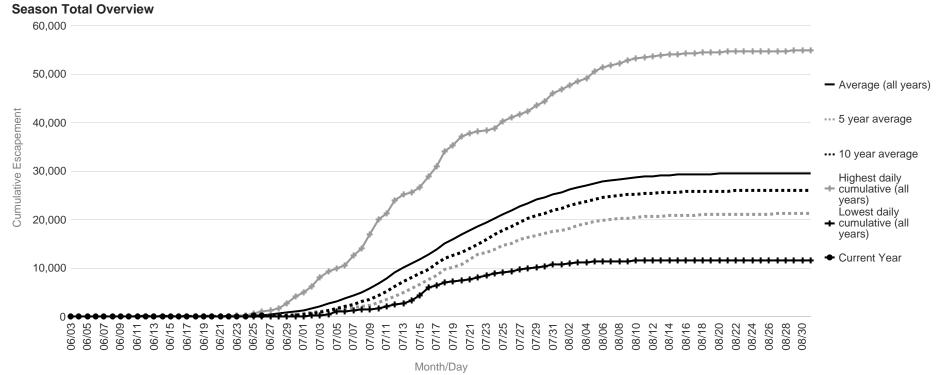
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	10	49	17	49	54
06/21	0	33	77	28	77	58
06/22	0	51	98	39	110	68
06/23	0	89	124	54	188	79
06/24	0	140	182	83	271	110
06/25	0	181	145	78	552	140
06/26	0	329	201	119	1,001	156
06/27	0	516	233	146	1,347	
06/28	0	677	298	207	1,789	
06/29	44	936	413	301	2,721	
06/30	30	1,020	364	314	4,106	
07/01	97	1,274	575	492	5,035	
07/02	200	1,648	766	699	6,203	
07/03	289	2,173	978	911	8,014	
07/04	475	2,672	1,172	1,206	9,260	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	11,691	29,618	21,294	26,071	54,913

Focused Two-Week Data View



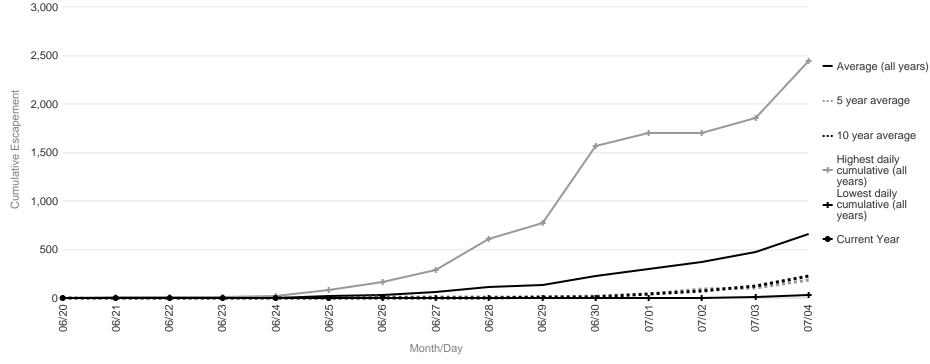


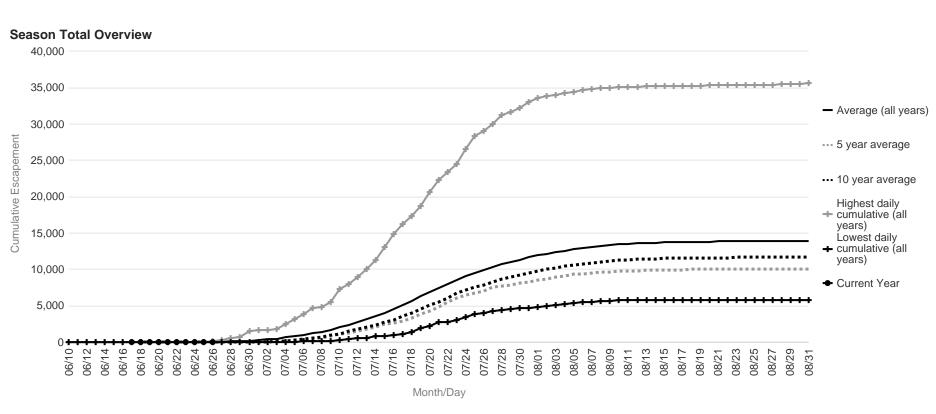
Tuluksak River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

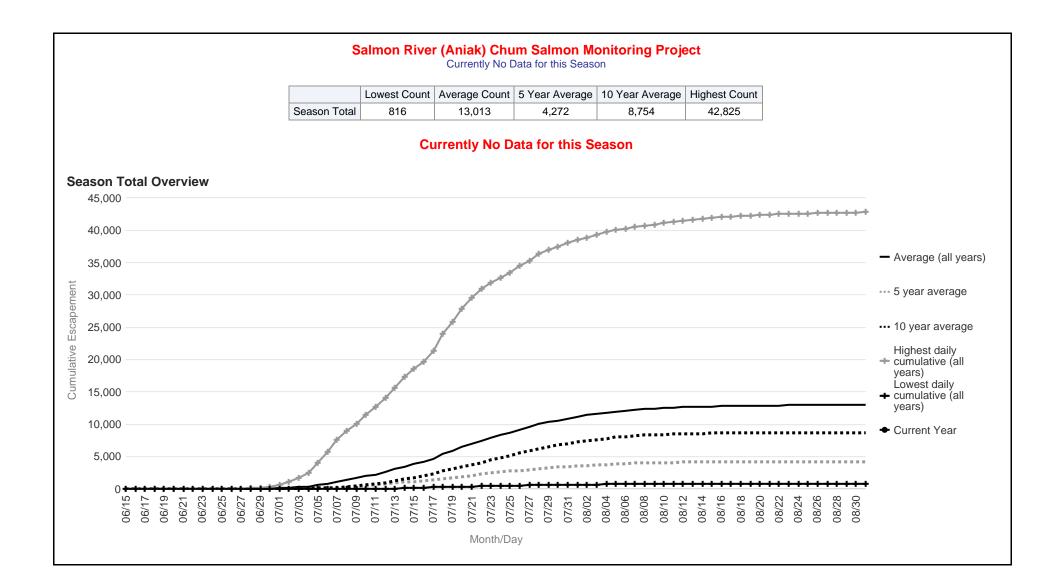
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	1	1	1	4	0
06/21	0	3	3	2	12	2
06/22	0	4	3	2	17	2
06/23	0	5	3	2	17	2
06/24	0	7	3	2	27	3
06/25	0	20	6	4	82	4
06/26	0	36	8	4	167	9
06/27	0	60	8	5	290	
06/28	0	112	10	6	612	
06/29	0	134	13	8	772	
06/30	1	224	25	15	1,568	
07/01	2	301	46	39	1,706	
07/02	3	370	90	79	1,707	
07/03	11	477	109	123	1,859	
07/04	35	660	184	228	2,443	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	5,868	13,997	10,170	11,741	35,696

Focused Two-Week Data View





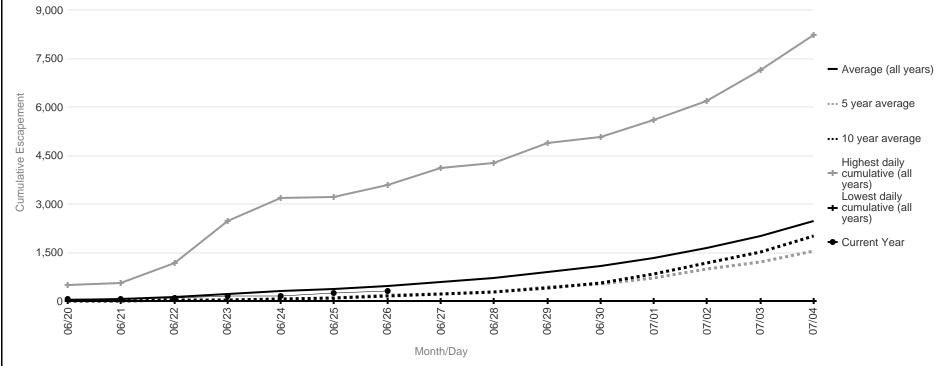


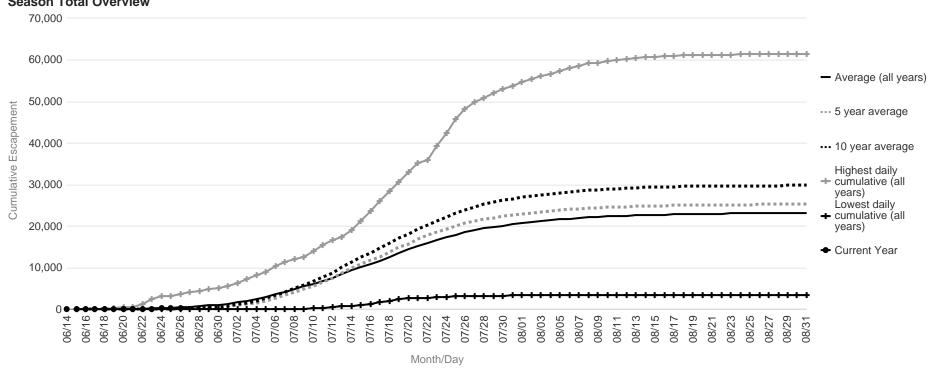
George River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	44	14	13	500	61
06/21	0	62	19	20	565	80
06/22	0	125	36	35	1,178	105
06/23	0	228	51	48	2,492	150
06/24	0	308	66	70	3,184	170
06/25	0	372	113	106	3,233	243
06/26	0	472	183	168	3,609	323
06/27	0	607	229	232	4,117	
06/28	0	727	296	291	4,284	
06/29	0	907	437	415	4,882	
06/30	0	1,085	519	576	5,097	
07/01	0	1,341	715	831	5,595	
07/02	0	1,641	982	1,168	6,204	
07/03	1	2,015	1,200	1,514	7,165	
07/04	3	2,483	1,548	2,026	8,239	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	3,507	23,223	25,344	29,852	61,531

Focused Two-Week Data View



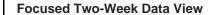


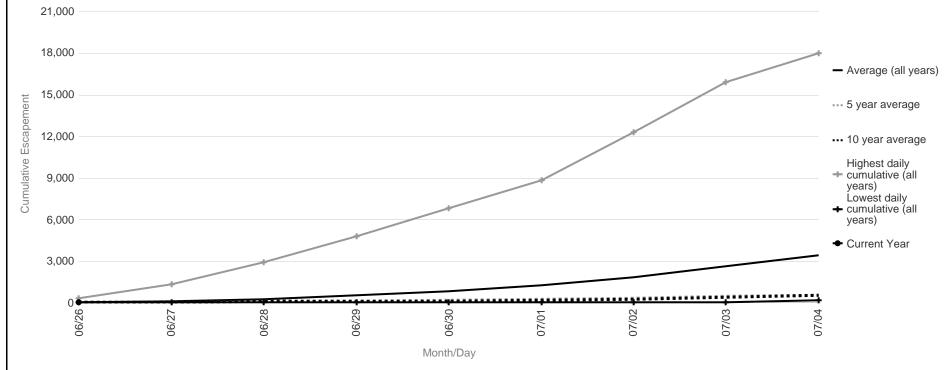
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

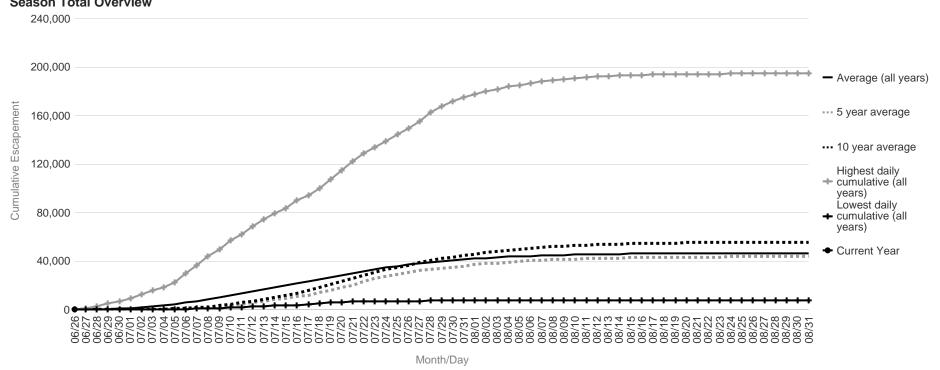
Escapement Goal Range: 15,000 to 49,000

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/26	0	25	16	9	324	30
06/27	0	101	40	25	1,343	
06/28	0	241	74	48	2,893	
06/29	0	511	105	77	4,754	
06/30	0	819	160	117	6,766	
07/01	0	1,233	234	175	8,821	
07/02	1	1,838	320	251	12,310	
07/03	4	2,581	431	358	15,917	
07/04	124	3,428	524	521	18,024	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	7,975	46,748	43,734	55,690	194,887





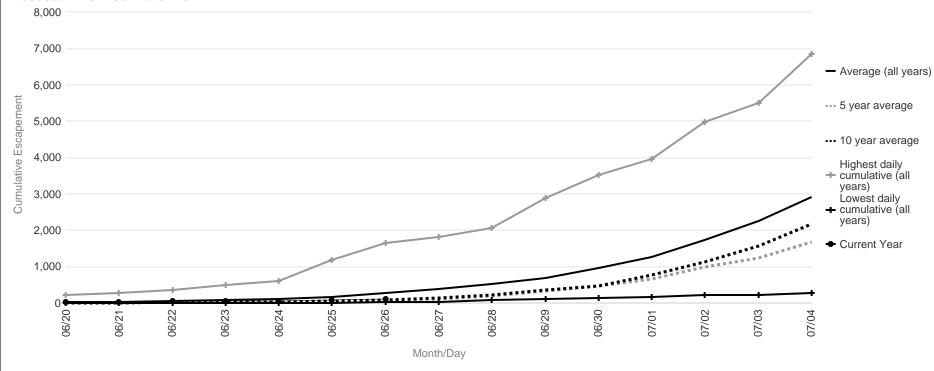


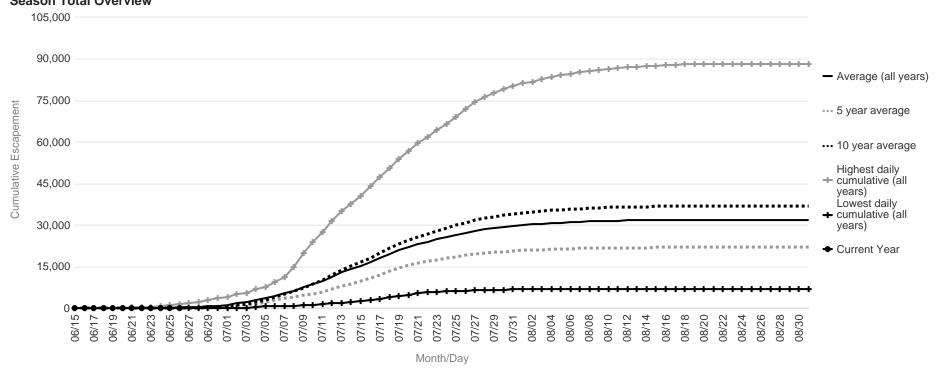
Tatlawiksuk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

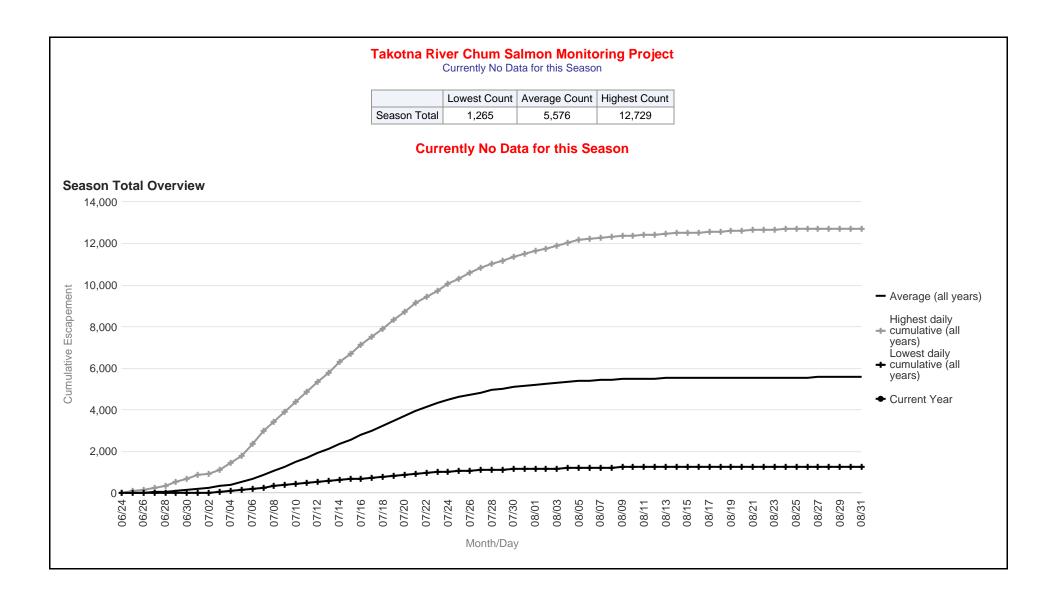
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	21	9	8	233	21
06/21	0	32	17	16	286	38
06/22	0	53	27	23	367	49
06/23	0	81	33	28	487	63
06/24	11	111	45	39	607	65
06/25	15	183	58	57	1,201	95
06/26	19	288	74	87	1,651	109
06/27	31	385	123	137	1,826	
06/28	97	515	205	228	2,067	
06/29	112	697	348	349	2,901	
06/30	132	965	479	478	3,535	
07/01	165	1,269	654	768	3,959	
07/02	221	1,731	987	1,128	4,996	
07/03	226	2,274	1,229	1,564	5,497	
07/04	276	2,922	1,679	2,167	6,851	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	7,076	32,034	22,043	36,974	88,202

Focused Two-Week Data View





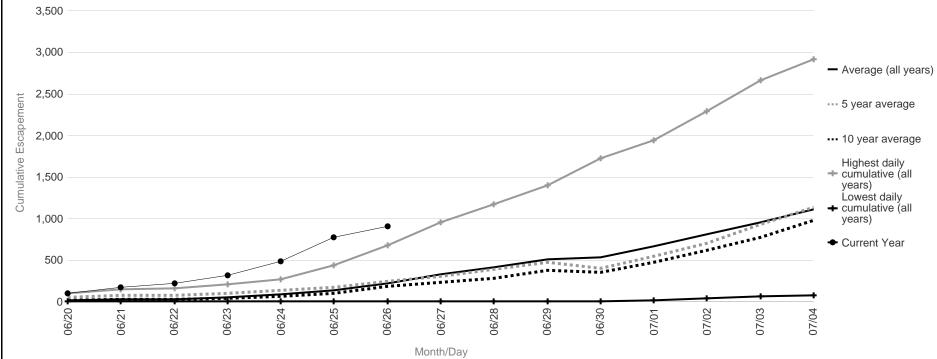


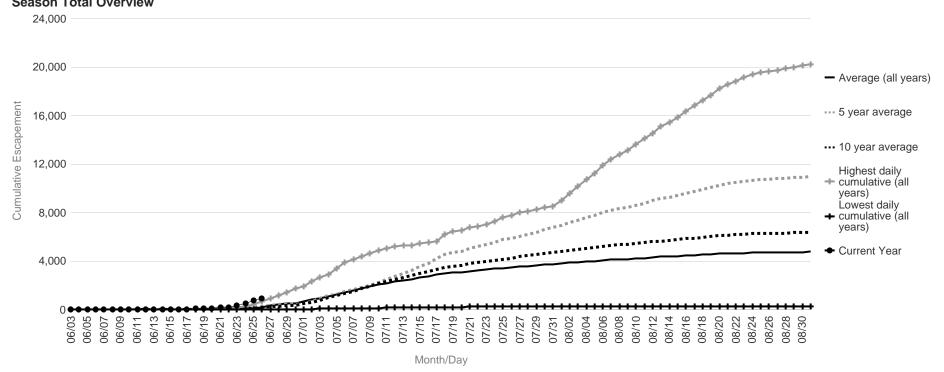
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

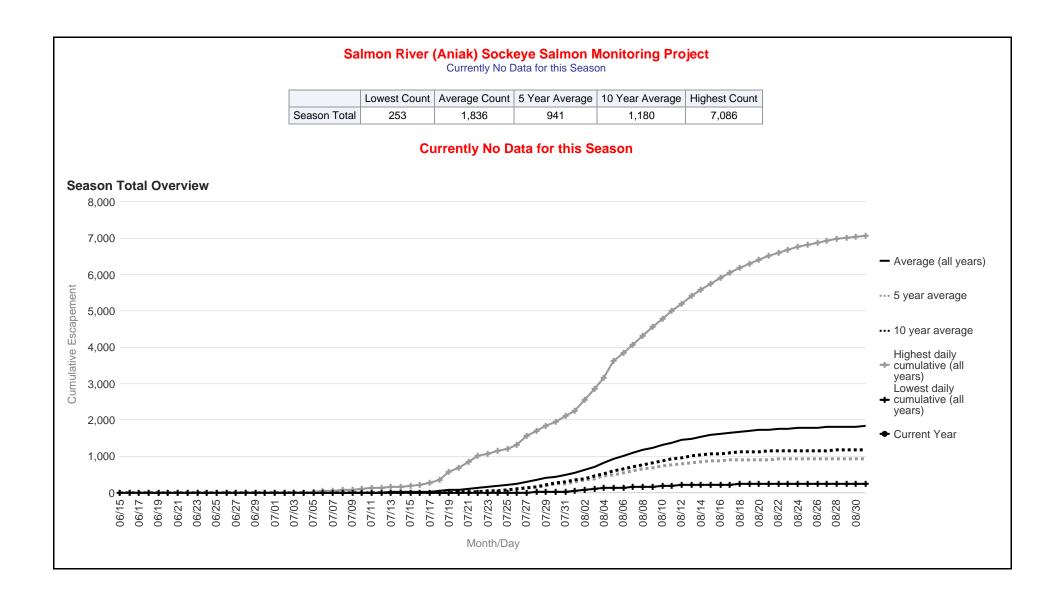
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/20	0	14	48	19	95	103
06/21	0	20	71	28	142	173
06/22	0	26	77	32	153	216
06/23	0	47	103	44	205	319
06/24	0	82	135	60	270	480
06/25	0	129	167	93	430	778
06/26	0	218	244	181	672	902
06/27	0	326	309	231	953	
06/28	0	410	388	284	1,174	
06/29	4	509	477	370	1,402	
06/30	7	536	398	350	1,724	
07/01	16	659	548	471	1,946	
07/02	37	804	705	619	2,293	
07/03	59	951	932	776	2,667	
07/04	70	1,108	1,132	975	2,913	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	272	4.793	11.090	6.415	20.495

Focused Two-Week Data View







Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

Escapement Goal Range: 4,400 to 17,000

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	10 year average	Highest daily cumulative (all years)	Current Year
06/26	0	1	0	0	18	0
06/27	0	6	0	0	170	
06/28	0	14	0	0	392	
06/29	0	37	0	1	932	
06/30	0	73	1	2	1,637	
07/01	0	137	3	3	2,611	
07/02	0	241	5	5	3,863	
07/03	0	374	8	8	4,803	
07/04	0	536	12	13	5,427	

	Lowest Count	Average Count	5 Year Average	10 Year Average	Highest Count
Season Total	1,732	12,687	10,179	13,949	61,382



