

# 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: 7/28/2021

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 (ONC/KRITFC)
- 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:
- Commercial Catch Report: N/A
- Processor Report: N/A
- Sport Fish Report:
- Trawl Bycatch Report
- Donlin Gold
- Intercept Fishery Report: *optional*
- 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:

- Chum Salmon Conversation

**NEW BUSINESS:** Working Group Letter to Governor

### COMMENTS FROM WORKING GROUP MEMBERS:

**NEXT MEETING DATE:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Place:** \_\_\_\_\_

## **Informational Packet**

### **Information Packets *ARE*:**

- **Intended to help inform Working Group discussions.**
- **To be viewed and used in context with Working Group meetings only.**

### **Packets *ARE NOT*:**

- **To be viewed as standalone documents.**
- **A final say on fisheries management decisions.**

### **Please use this information responsibly:**

Packet information is an incomplete snapshot of an ongoing discussion and changing conditions. Packet information should not be reproduced for any purpose other than to describe Working Group meeting discussions.

**Misuse** of Packet information can contribute to misunderstandings that can **cause harm to salmon users** and potentially **damage salmon resources**.

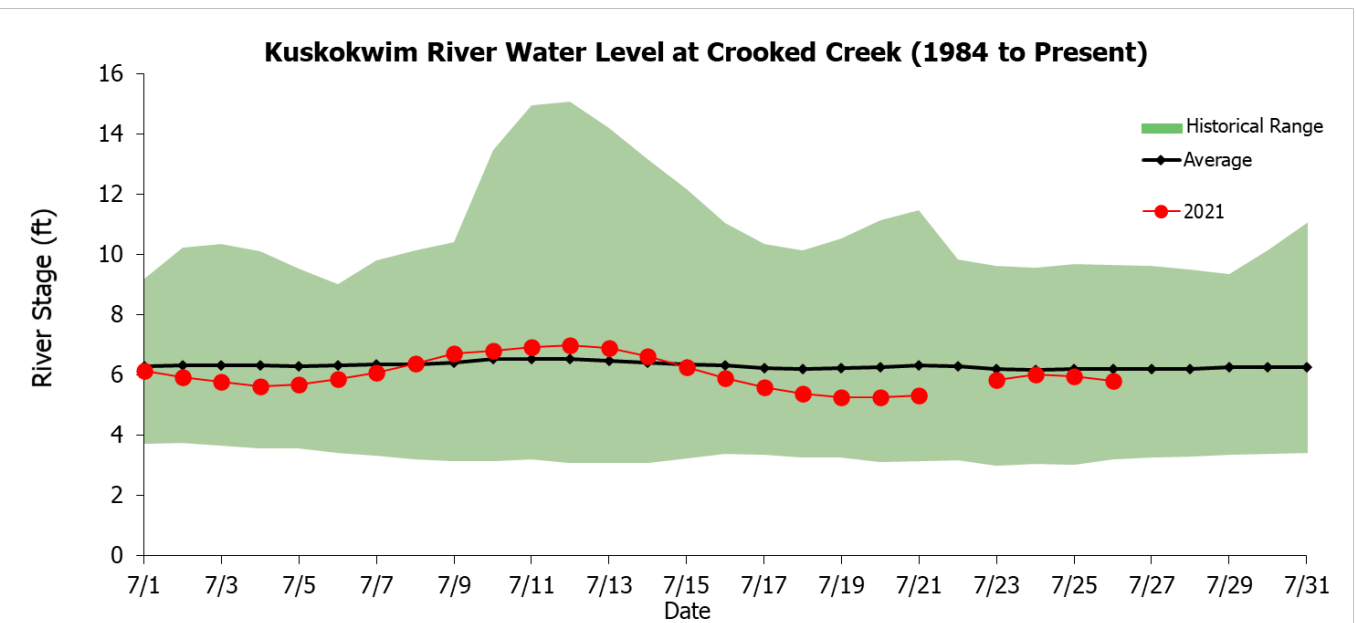
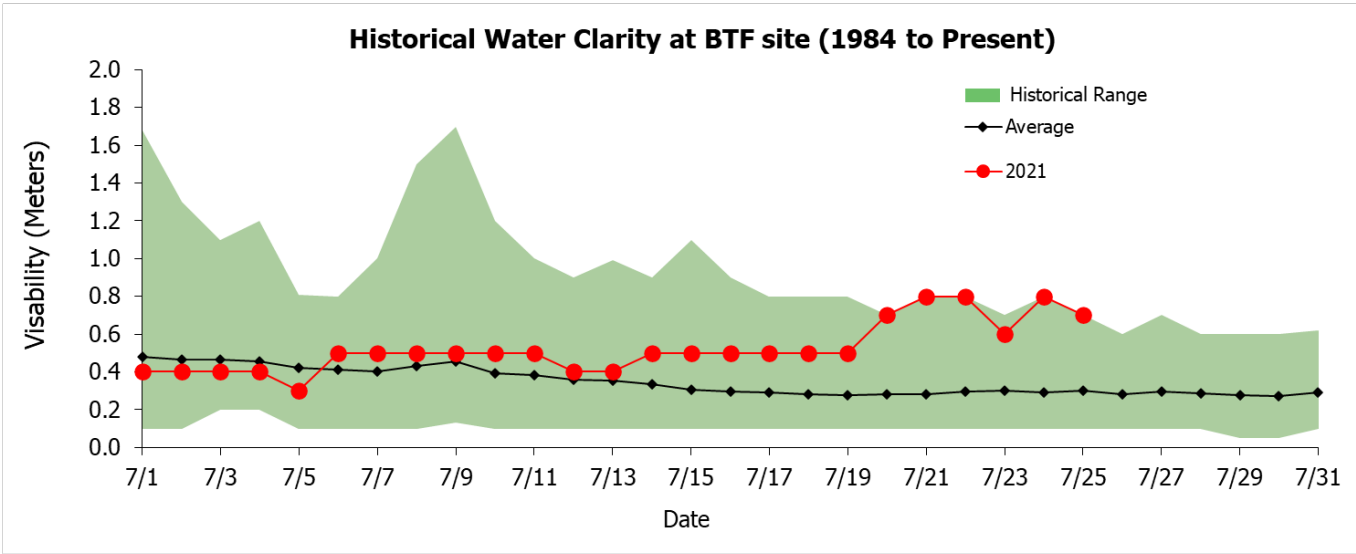
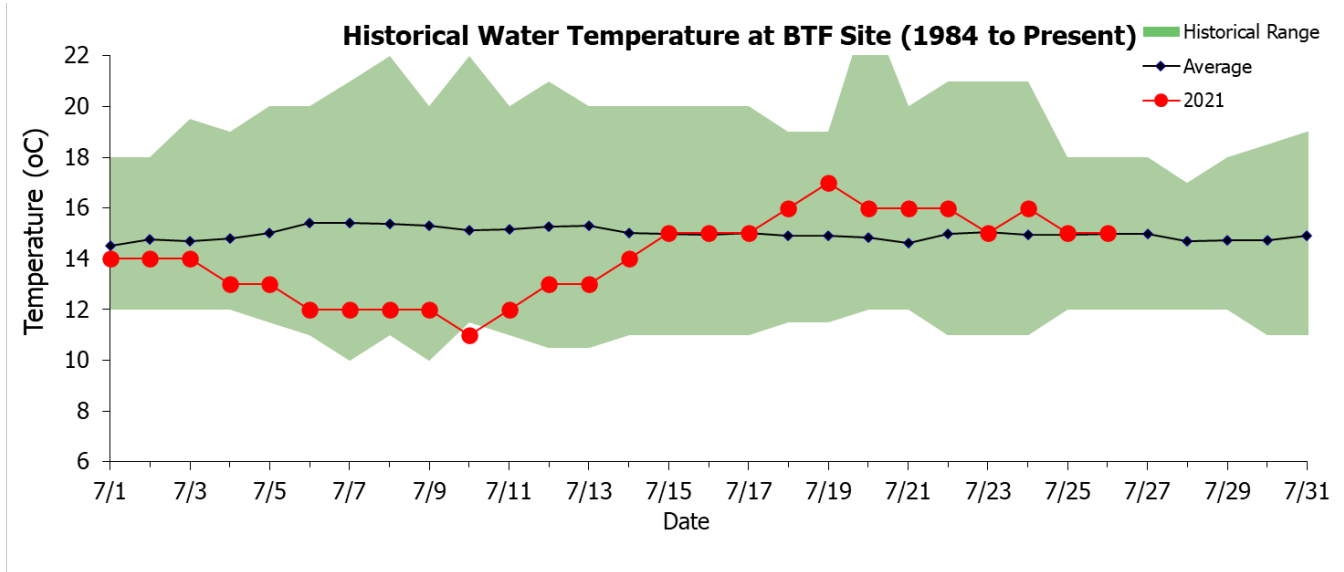
**Ask Questions:** ADF&G staff will be happy to answer biology and management questions. Please call **1-855-933-2433** to reach ADF&G Kuskokwim Area staff.

**Attend Meetings:** Each Working Group meeting is announced at least 48 hours prior to time and date of meeting. In addition, each meeting is recorded. Recordings can be found here:  
**[http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarea\\_kuskokwim.kswg](http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyarea_kuskokwim.kswg)**

Viewing the information packet while listening to meetings/recordings will provide a better understanding of the information presented in this packet.

**Thank you,**  
**Nick Smith and Ben Gray**  
**Working Group Coordinators**

## Weather summary at BTF as of 7/26



# Kuskokwim River Salmon Assessment Update

## 7/26/2021

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This document presents the key assessment information considered by managers in-season. The production of this document is a collaborative effort between USFWS and ADF&G. **All data and analyses contained are preliminary and are subject to change, so please make interpretations carefully.**

If you have any questions about the content, please contact Spencer Rearden (USFWS; [spencer\\_rearden@fws.gov](mailto:spencer_rearden@fws.gov)) or Sean Larson (ADF&G; [sean.larson@alaska.gov](mailto:sean.larson@alaska.gov)). Major credit for the development of this data packet belongs to Benjamin Staton.

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#### Abbreviations:

- BTF: Bethel Test Fishery
- ATF: Aniak Test Fishery
- CPUE: Catch-per-unit-effort
- EOS: End-of-Season
- ADF&G: Alaska Department of Fish and Game
- KRITFC: Kuskokwim River Inter-tribal Fisheries Commission
- ONC: Orutsaramiut Native Council
- USFWS: United States Fish and Wildlife Service
- YDNWR: Yukon Delta National Wildlife Refuge

To view escapement information, please visit the ADF&G Kuskokwim River Fish Counts page: \* <http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

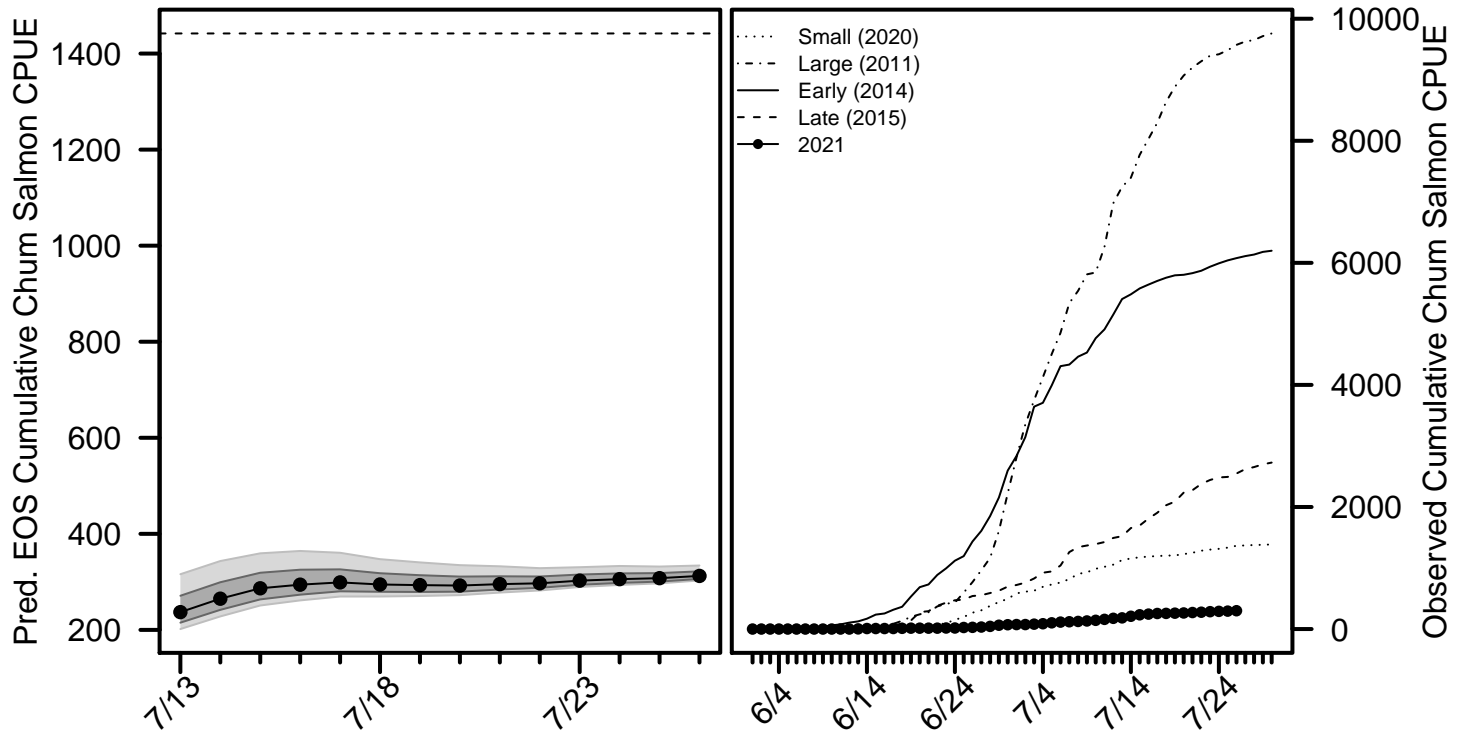
For the most up-to-date information regarding fishing opportunities please visit:

- USFWS: [https://www.fws.gov/refuge/yukon\\_delta/wildlife\\_and\\_habitat/dailyupdate.html](https://www.fws.gov/refuge/yukon_delta/wildlife_and_habitat/dailyupdate.html)
- ADF&G: <http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main>

# Chum Salmon BTF Summary (7/26)

- The BTF daily CPUE was **7**.
- The BTF cumulative CPUE is now **300**.
- **0%** years since 2008 fell below this cumulative CPUE on this date.
- **96%** of the run is complete based on historical average run timing.
- **93% - 98%** of the run is complete based the central 50% of all historical run timing scenarios.
- **1% - 3%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, chum salmon made up **16%** of the BTF catches, compared to **52%** 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 2020. *Right:* The cumulative BTF CPUE from 2021 plotted along with four previous years intended to represent a range of early/late and small/large index values.



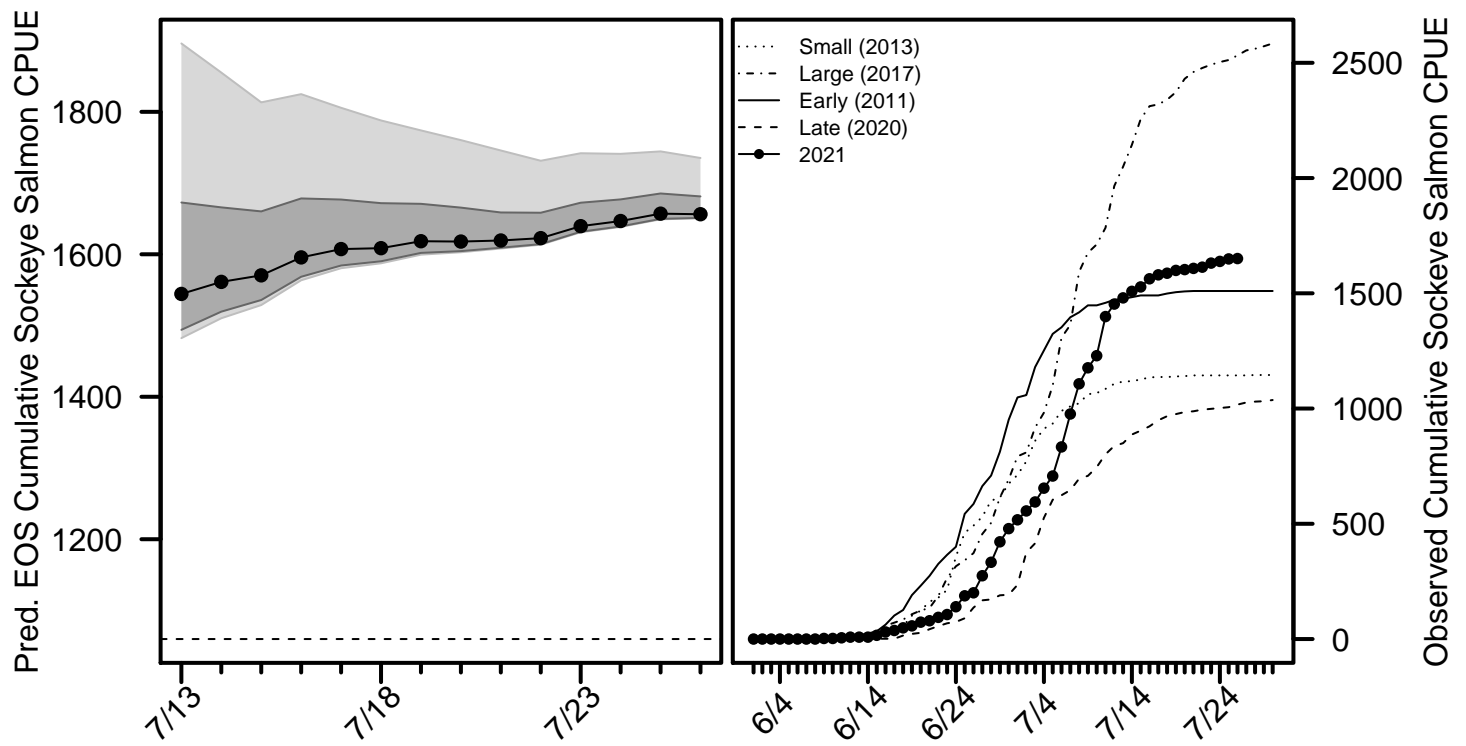
For more detailed information, see the [chum salmon appendix](#) at the end of this document.

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## Sockeye Salmon BTF Summary (7/26)

- The BTF daily CPUE was **2**.
- The BTF cumulative CPUE is now **1,651**.
- **54%** years since 2008 fell below this cumulative CPUE on this date.
- **100%** of the run is complete based on historical average run timing.
- **98% - 100%** of the run is complete based the central 50% of all historical run timing scenarios.
- **0% - 1%** 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 **4%** 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 2020. *Right:* The cumulative BTF CPUE from 2021 plotted along with four previous years intended to represent a range of early/late and small/large index values.



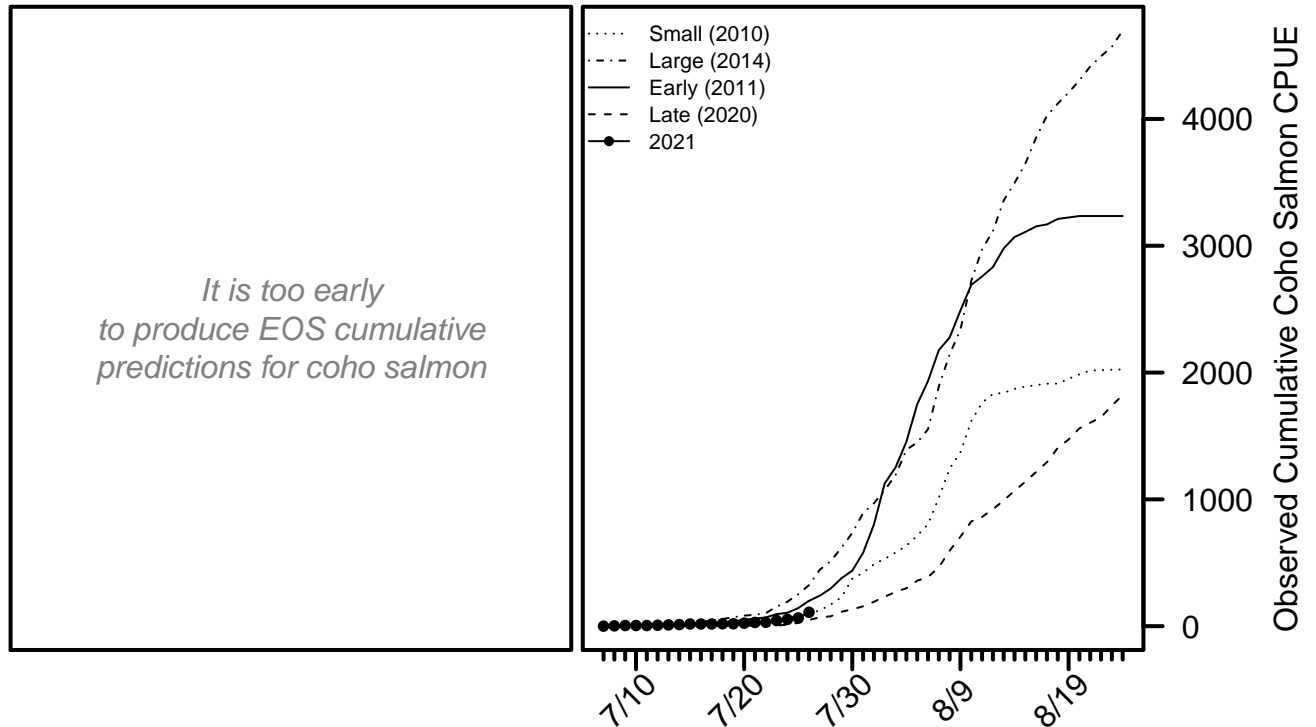
For more detailed information, see the [sockeye salmon appendix](#) at the end of this document.

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## Coho Salmon BTF Summary (7/26)

- The BTF daily CPUE was **45**.
- The BTF cumulative CPUE is now **109**.
- **31%** years since 2008 fell below this cumulative CPUE on this date.
- **4%** of the run is complete based on historical average run timing.
- **1% - 9%** of the run is complete based the central 50% of all historical run timing scenarios.
- **6% - 15%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, coho salmon made up **63%** of the BTF catches, compared to **43%** 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 2021 plotted along with four previous years intended to represent a range of early/late and small/large index values.

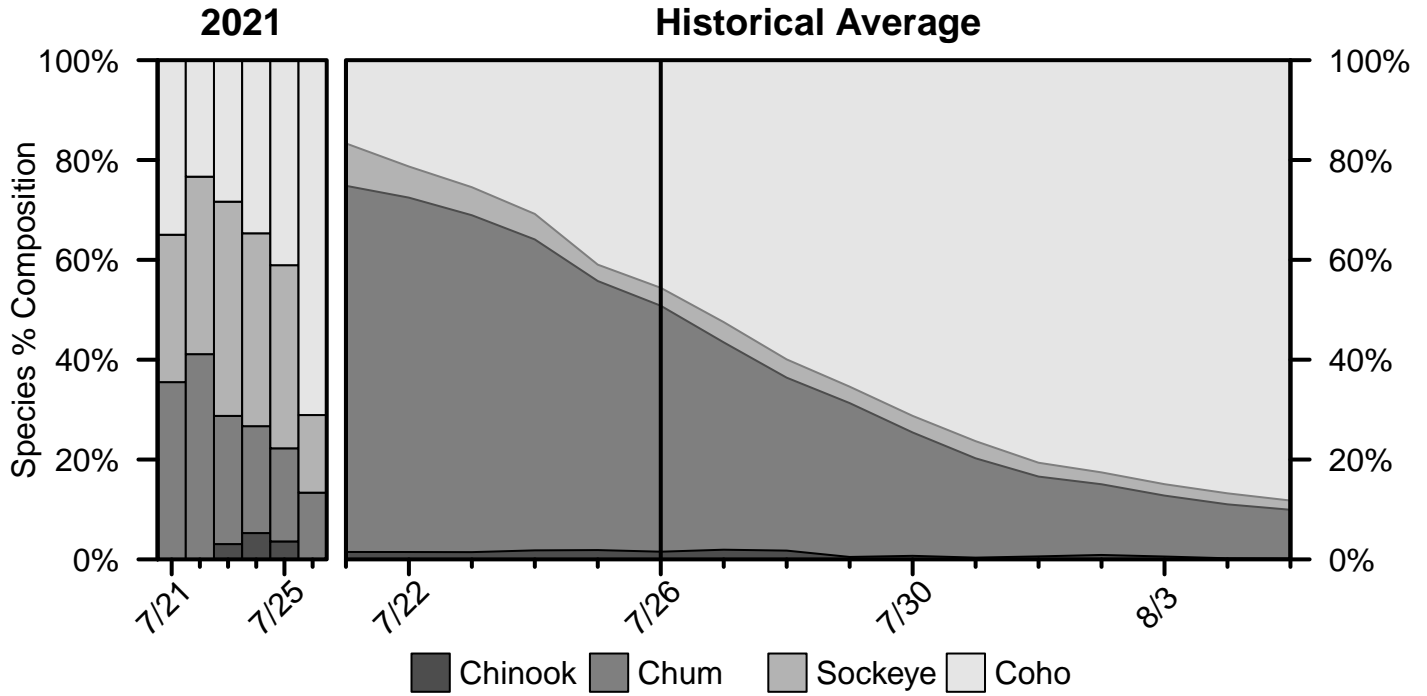


For more detailed information, see the [coho salmon appendix](#) at the end of this document.

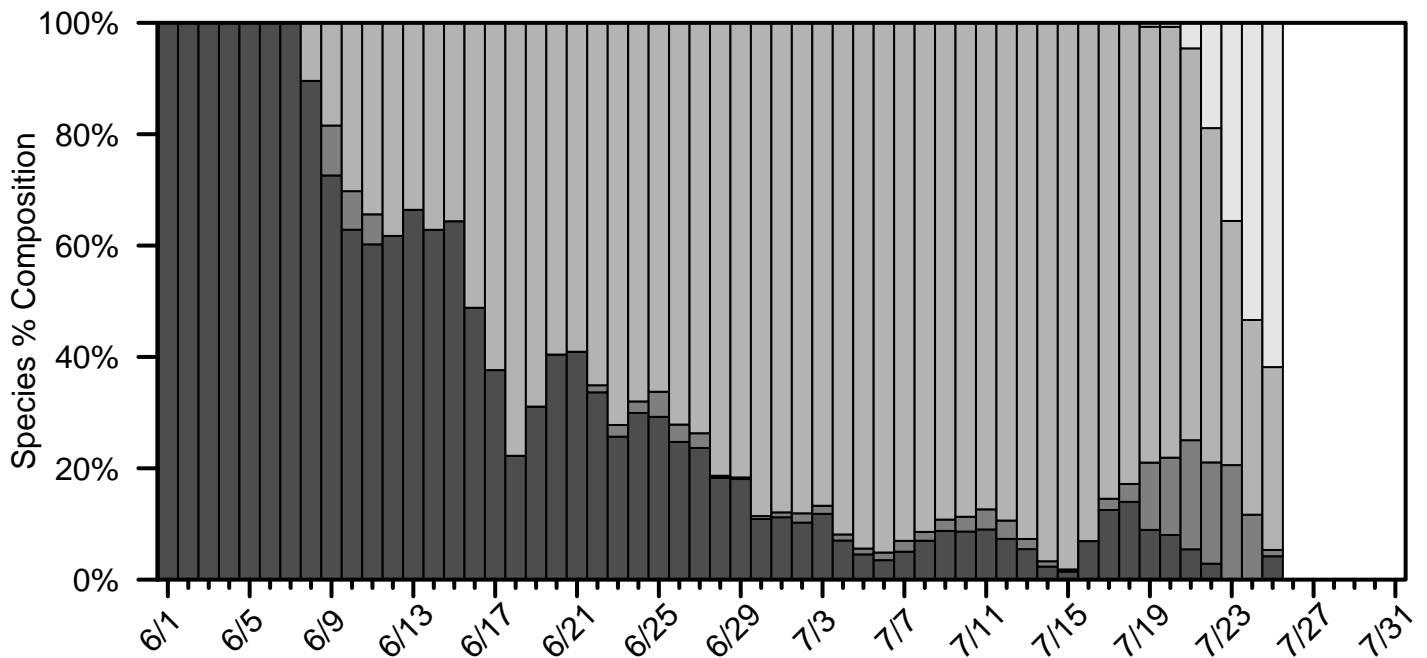
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# Percent Composition by Salmon Species

**Percent Composition Figure 1.** Species percent composition in the BTF from 2021 and based on the historical average. The composition presented on each day represents the average composition over the past 2 days.



**Species Composition Figure 2.** Species percent composition from the sonar estimates from 2021 (salmon species only, excluding pink salmon). The composition presented on each day represents the average composition over the past 3 days.

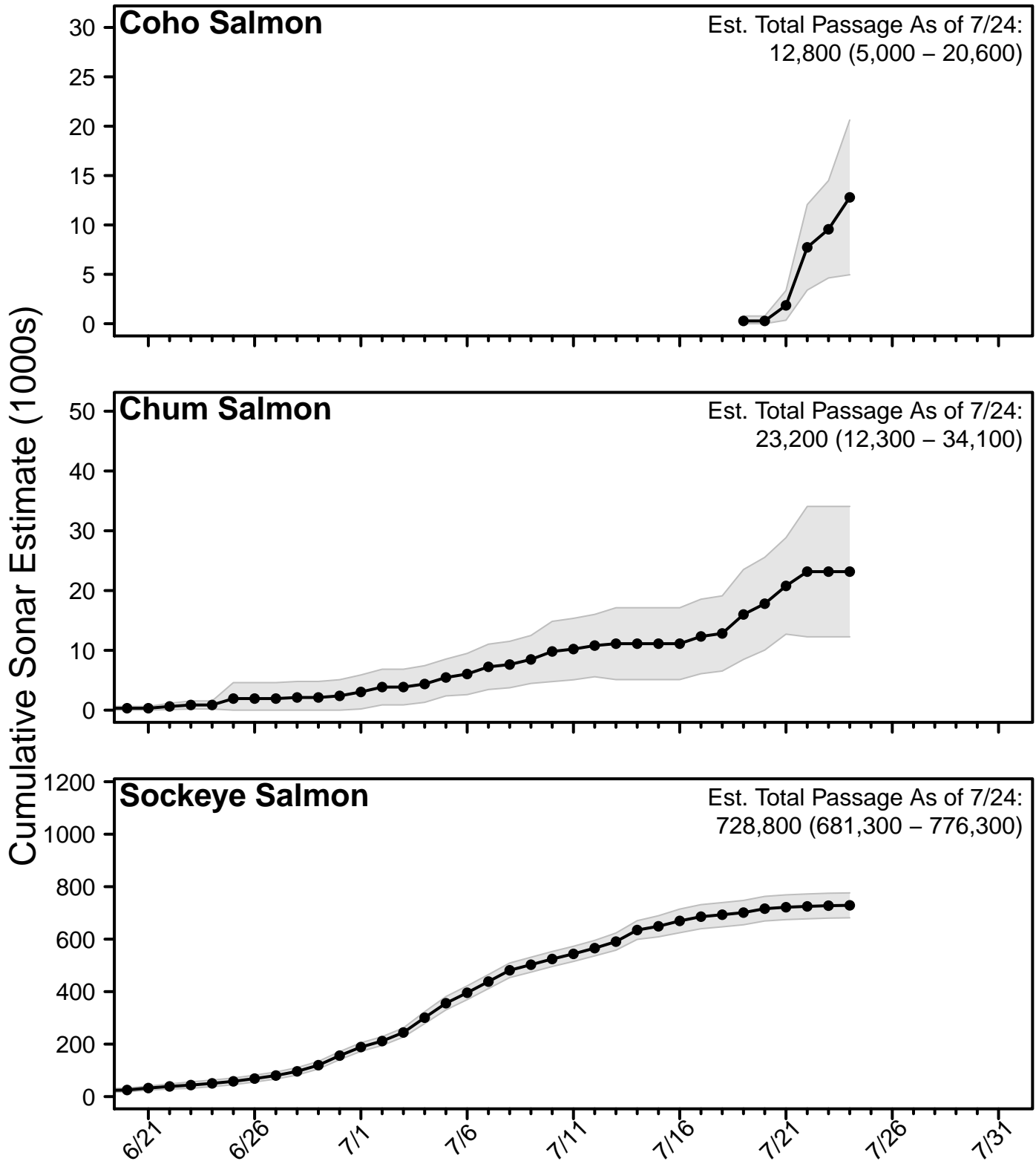


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# Sonar Passage Estimates

**Sonar Figure 1.** Cumulative estimates of salmon passage from the 2021 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day.



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## In-Season Harvest Estimates

In-season harvest estimates are produced by combining counts of total fishing effort (usually obtained via aerial surveys performed by USFWS) 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 KRITFC and ONC, with harvest data collected by community based harvest monitors and ONC. Fishing periods from 6/2-6/9 were set net only opportunities. More detailed information can be found on the KRITFC website (<https://www.kuskosalmon.org/2021-fishing-info>).

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
6/2	30	30	0.23	0.23
6/5	310	340	0.47	0.43
6/9	480	820	0.19	0.21
6/12	3,220	4,040	0.06	0.06
6/15	6,780	10,820	0.06	0.04
6/19	6,190	17,010	0.08	0.04
6/28	2,980	19,990	0.06	0.04
7/2	1,330	21,320	0.09	0.03
7/16	240	21,560	0.15	0.03

**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
6/2	0	0	0	0
6/5	20	20	0.65	0.65
6/9	0	20	0	0.65
6/12	70	90	0.18	0.2
6/15	350	440	0.15	0.13
6/19	990	1,430	0.19	0.14
6/28	960	2,390	0.1	0.09
7/2	1,150	3,540	0.15	0.08
7/16	520	4,060	0.18	0.07

**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
6/2	0	0	0	0
6/5	50	50	0.44	0.44
6/9	20	70	0.43	0.34
6/12	340	410	0.16	0.14
6/15	1,400	1,810	0.11	0.09
6/19	2,400	4,210	0.07	0.06
6/28	6,880	11,090	0.07	0.05
7/2	8,990	20,080	0.07	0.04
7/16	2,830	22,910	0.09	0.04

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## Chinook Salmon Appendix

\*\*\* The BTF daily CPUE was **0** (cumulative: **533**).

\*\*\* The table below shows cumulative CPUE from the BTF from 2021 and in previous years.

Date	2021	2020	2019	2018	2017	5-Yr Avg.	2008 - 2020 Avg.
<b>7/23</b>	531	480	841	652	360	600	559
<b>7/24</b>	533	480	843	652	363	601	560
<b>7/25</b>	533	480	843	652	363	602	560
<b>7/26</b>	<b>533</b>	<b>480</b>	<b>843</b>	<b>657</b>	<b>364</b>	<b>604</b>	<b>561</b>
<b>EOS</b>		487	848	667	374	613	568

\*\*\* If the run ended on 7/26, 50% of the run would have passed BTF on **6/25**, which is **2 days later** than average.

\*\*\* The ATF ended operations on 7/13 with an EOS cumulative CPUE value of 1,891 for Chinook salmon, which is below the 2016-2020 average EOS cumulative CPUE of 2,664.

\*\*\* The cumulative Chinook salmon passage (95% CI) at the sonar, as of **7/24**, is **100,300 (82,400 - 118,200)** fish.

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## Chum Salmon Appendix

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

Date	2021	2020	2019	2018	2017	5-Yr Avg.	2008 - 2020 Avg.
<b>7/23</b>	284	1,302	4,918	7,449	6,410	4,709	5,670
<b>7/24</b>	290	1,314	4,987	7,517	6,473	4,762	5,740
<b>7/25</b>	293	1,334	5,097	7,581	6,549	4,824	5,793
<b>7/26</b>	<b>300</b>	<b>1,364</b>	<b>5,302</b>	<b>7,722</b>	<b>6,566</b>	<b>4,907</b>	<b>5,861</b>
<b>7/27</b>		1,370	5,475	7,824	6,594	4,973	5,914
<b>7/28</b>		1,377	5,565	7,888	6,612	5,016	5,956
<b>7/29</b>		1,381	5,688	7,951	6,622	5,064	6,001
<b>EOS</b>		1,442	6,427	8,212	6,785	5,352	6,256

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

Timing	Midpoint	7/26 Cumulative %
<b>Earliest</b>	6/23	100%
<b>Early 10%</b>	7/1	99%
<b>Early 25%</b>	7/3	98%
<b>Median</b>	7/6	96%
<b>Late 25%</b>	7/8	93%
<b>Late 10%</b>	7/11	90%
<b>Latest</b>	7/15	86%

The ATF ended operations on 7/13 with an EOS cumulative CPUE value of 267 for chum salmon, which is below the 2016-2020 average EOS cumulative CPUE of 5,477.

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## Sockeye Salmon Appendix

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

Date	2021	2020	2019	2018	2017	5-Yr Avg.	2008 - 2020 Avg.
<b>7/23</b>	1,631	999	2,453	1,987	2,492	1,992	1,672
<b>7/24</b>	1,638	1,002	2,462	2,010	2,503	2,006	1,679
<b>7/25</b>	1,649	1,006	2,462	2,030	2,512	2,020	1,685
<b>7/26</b>	<b>1,651</b>	<b>1,017</b>	<b>2,468</b>	<b>2,057</b>	<b>2,532</b>	<b>2,038</b>	<b>1,694</b>
<b>7/27</b>		1,026	2,483	2,072	2,554	2,052	1,701
<b>7/28</b>		1,030	2,508	2,088	2,561	2,070	1,709
<b>7/29</b>		1,032	2,546	2,117	2,572	2,091	1,718
<b>EOS</b>		1,060	2,685	2,275	2,690	2,234	1,779

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

Timing	Midpoint	7/26 Cumulative %
<b>Earliest</b>	6/22	100%
<b>Early 10%</b>	6/24	100%
<b>Early 25%</b>	6/27	100%
<b>Median</b>	6/29	100%
<b>Late 25%</b>	7/2	98%
<b>Late 10%</b>	7/6	95%
<b>Latest</b>	7/10	89%

The ATF ended operations on 7/13 with an EOS cumulative CPUE value of 241 for sockeye salmon, which is above the 2017-2020 average EOS cumulative CPUE of 159.

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## Coho Salmon Appendix

Coho Salmon Table A1. Cumulative CPUE from the BTF.

Date	2021	2020	2019	2018	2017	5-Yr Avg.	2008 - 2020 Avg.
<b>7/23</b>	44	5	40	5	41	35	107
<b>7/24</b>	53	12	50	19	58	47	134
<b>7/25</b>	65	26	57	22	94	64	168
<b>7/26</b>	<b>109</b>	<b>49</b>	<b>84</b>	<b>30</b>	<b>119</b>	<b>88</b>	<b>211</b>
<b>7/27</b>		70	116	40	136	109	256
<b>7/28</b>		77	131	64	166	135	318
<b>7/29</b>		113	162	91	195	173	389
<b>EOS</b>		1,822	1,801	901	3,245	2,260	3,017

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

Timing	Midpoint	7/26 Cumulative %
<b>Earliest</b>	7/29	26%
<b>Early 10%</b>	8/4	16%
<b>Early 25%</b>	8/6	9%
<b>Median</b>	8/8	4%
<b>Late 25%</b>	8/11	1%
<b>Late 10%</b>	8/13	<1%
<b>Latest</b>	8/15	<1%

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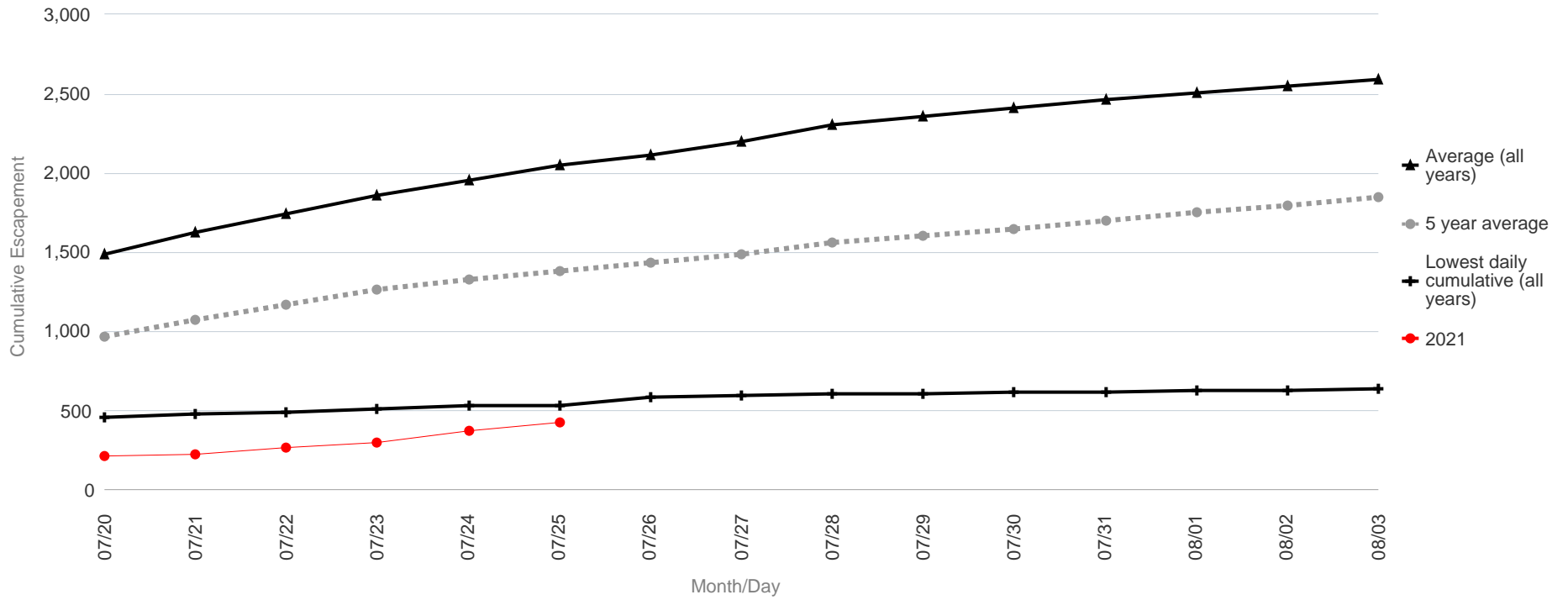
Salmon River (Aniak) Weir - Chinook Salmon (7/27/2021 8:01:03 PM).....	1
George River Weir - Chinook Salmon (7/27/2021 8:01:24 PM).....	2
Kogrukluk River Weir - Chinook Salmon (7/27/2021 8:01:42 PM).....	3
Takotna River Weir - Chinook Salmon (7/27/2021 8:02:01 PM).....	4
Salmon River (Pitka Fork) Weir - Chinook Salmon (7/27/2021 8:02:18 PM).....	5
Salmon River (Aniak) Weir - Chum Salmon (7/27/2021 8:02:27 PM).....	6
George River Weir - Chum Salmon (7/27/2021 8:02:47 PM).....	7
Kogrukluk River Weir - Chum Salmon (7/27/2021 8:02:58 PM).....	8
Takotna River Weir - Chum Salmon (7/27/2021 8:03:12 PM).....	9
Salmon River (Aniak) - Sockeye Salmon (7/27/2021 8:03:34 PM).....	10
Kogrukluk River Weir - Sockeye Salmon (7/27/2021 8:03:53 PM).....	11
Telaquana River Weir - Sockeye Salmon (7/27/2021 8:04:05 PM).....	12
Escapement Project Map (7/27/2021 8:04:16 PM).....	13

### Salmon River (Aniak) Salmon Monitoring Project Passage of Chinook Salmon

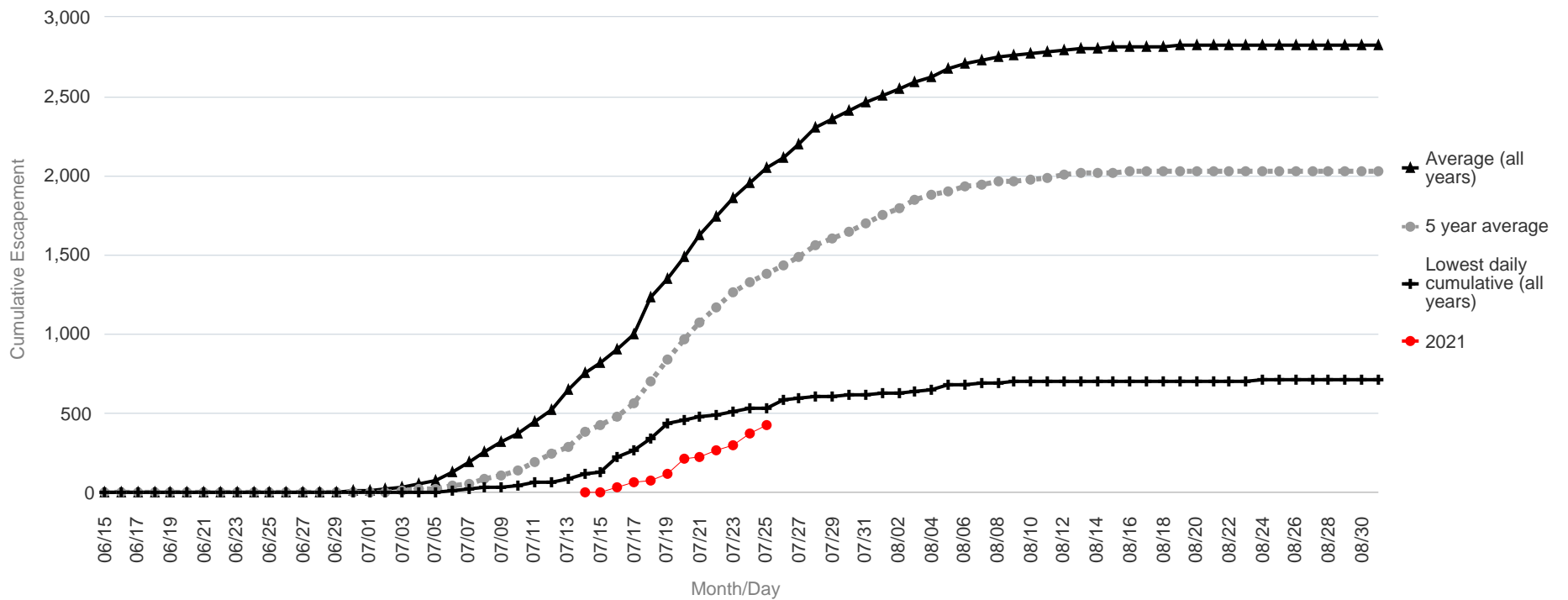
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	455	1,486	965	218
07/21	476	1,629	1,069	230
07/22	491	1,745	1,165	269
07/23	512	1,854	1,259	303
07/24	534	1,950	1,326	378
07/25	537	2,047	1,383	429
07/26	583	2,116	1,438	
07/27	600	2,199	1,492	
07/28	604	2,302	1,558	
07/29	611	2,361	1,609	
07/30	617	2,406	1,650	
07/31	622	2,459	1,696	
08/01	626	2,504	1,749	
08/02	631	2,547	1,794	
08/03	636	2,595	1,845	

	Lowest Count	Average Count	5 Year Average
Season Total	711	2,824	2,030

#### Focused Two-Week Data View



#### Season Total Overview





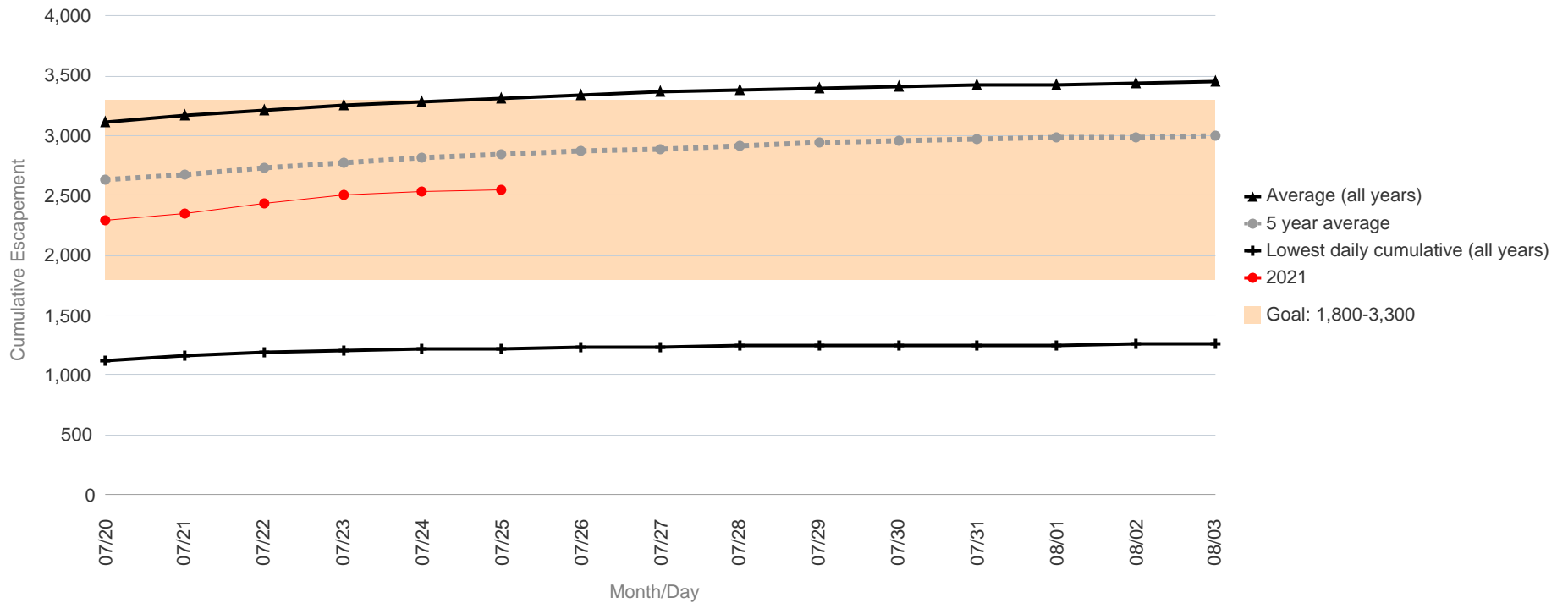
## George River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 1,800 to 3,300

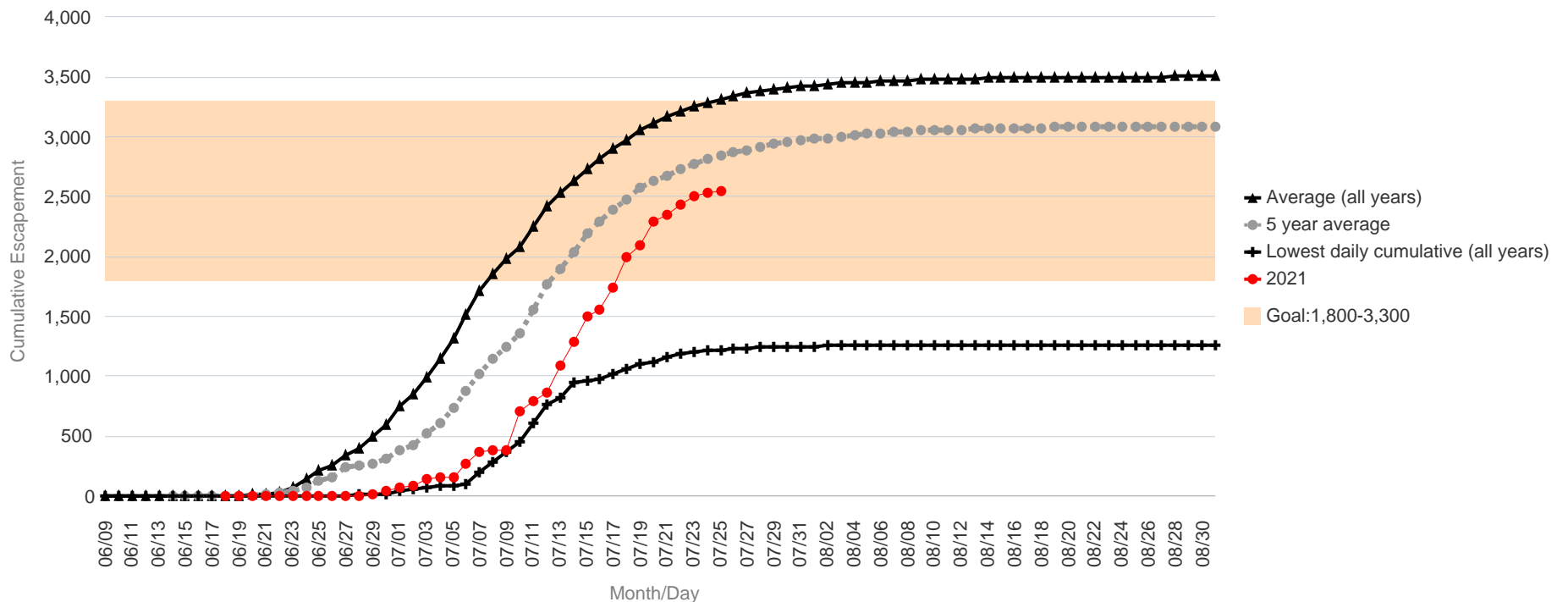
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	1,127	3,113	2,627	2,297
07/21	1,168	3,177	2,675	2,344
07/22	1,189	3,215	2,728	2,437
07/23	1,205	3,260	2,775	2,505
07/24	1,215	3,291	2,819	2,530
07/25	1,226	3,320	2,843	2,549
07/26	1,235	3,342	2,868	
07/27	1,239	3,365	2,894	
07/28	1,247	3,385	2,918	
07/29	1,248	3,400	2,938	
07/30	1,250	3,410	2,956	
07/31	1,251	3,422	2,972	
08/01	1,254	3,432	2,981	
08/02	1,255	3,441	2,995	
08/03	1,258	3,449	3,007	

	Lowest Count	Average Count	5 Year Average
Season Total	1,267	3,506	3,091

### Focused Two-Week Data View



### Season Total Overview



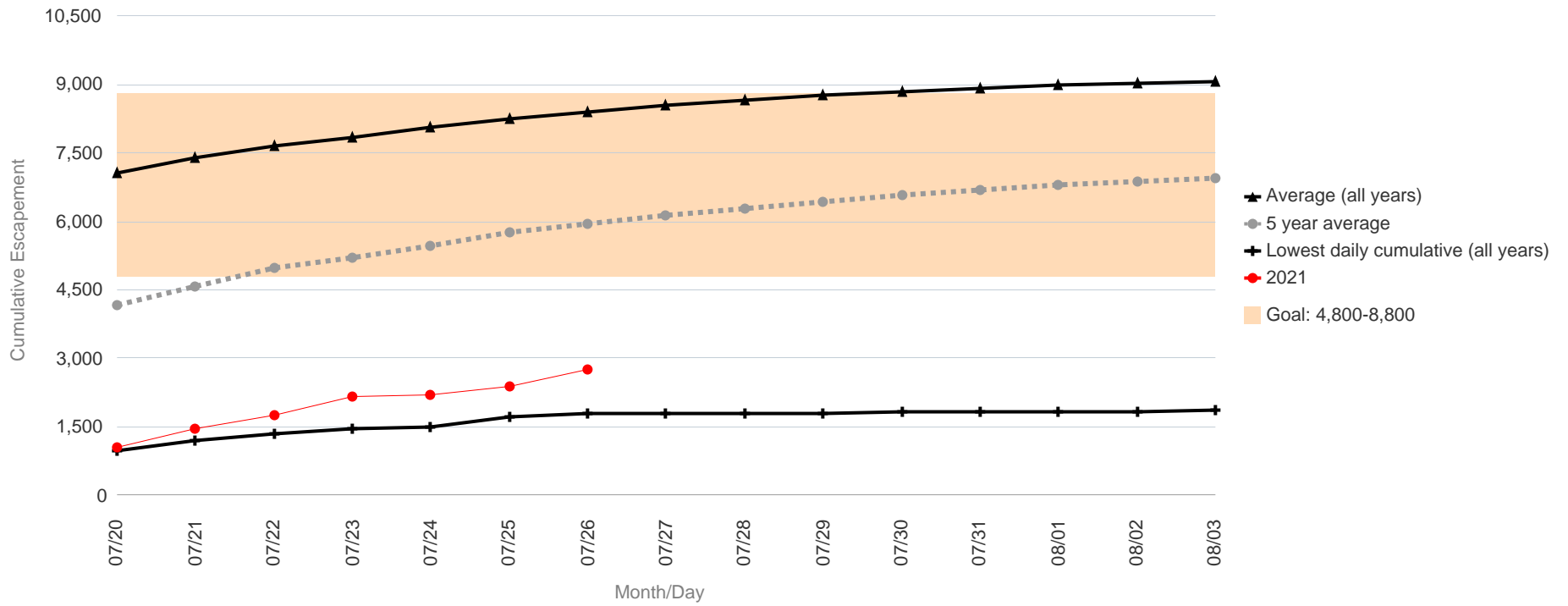
## Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,800 to 8,800

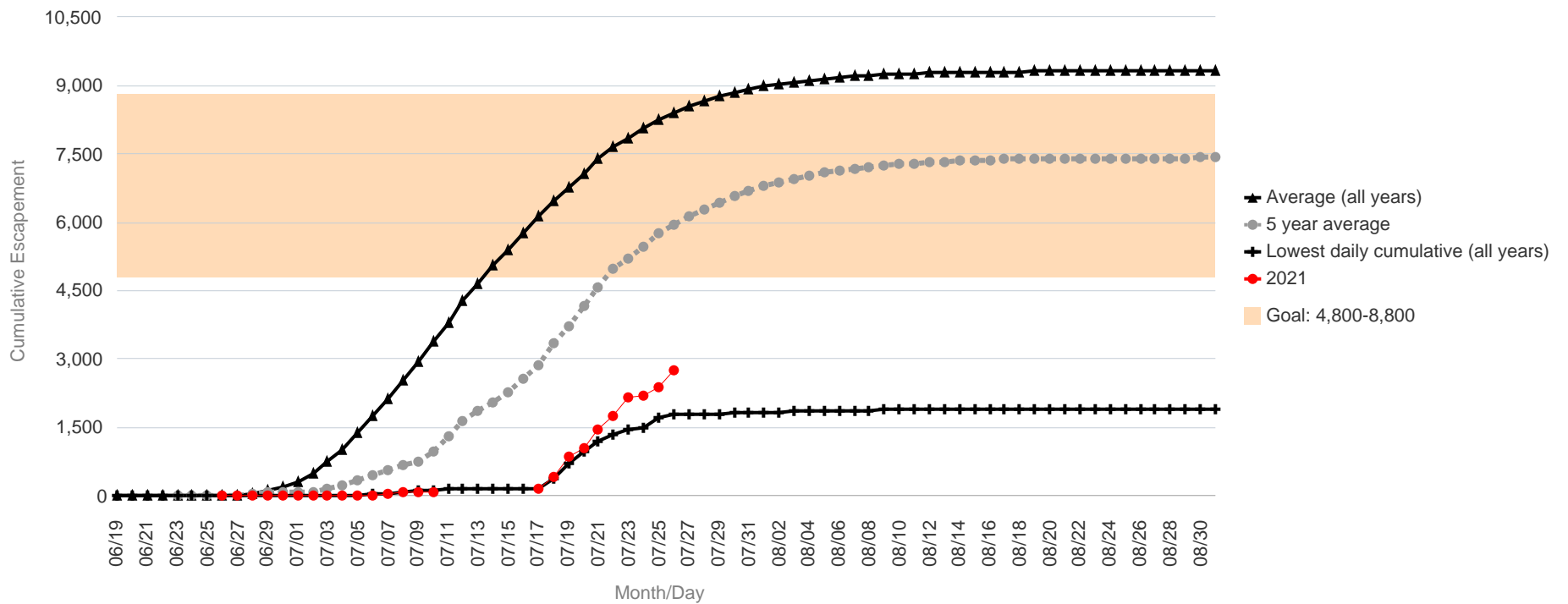
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	967	7,071	4,157	1,063
07/21	1,192	7,391	4,575	1,452
07/22	1,354	7,650	4,974	1,746
07/23	1,467	7,856	5,193	2,151
07/24	1,507	8,051	5,477	2,214
07/25	1,705	8,250	5,746	2,372
07/26	1,775	8,402	5,944	2,753
07/27	1,794	8,542	6,137	
07/28	1,800	8,663	6,275	
07/29	1,801	8,767	6,420	
07/30	1,812	8,855	6,587	
07/31	1,824	8,923	6,697	
08/01	1,834	8,979	6,801	
08/02	1,838	9,031	6,876	
08/03	1,848	9,078	6,961	

	Lowest Count	Average Count	5 Year Average
Season Total	1,919	9,334	7,420

### Focused Two-Week Data View



### Season Total Overview

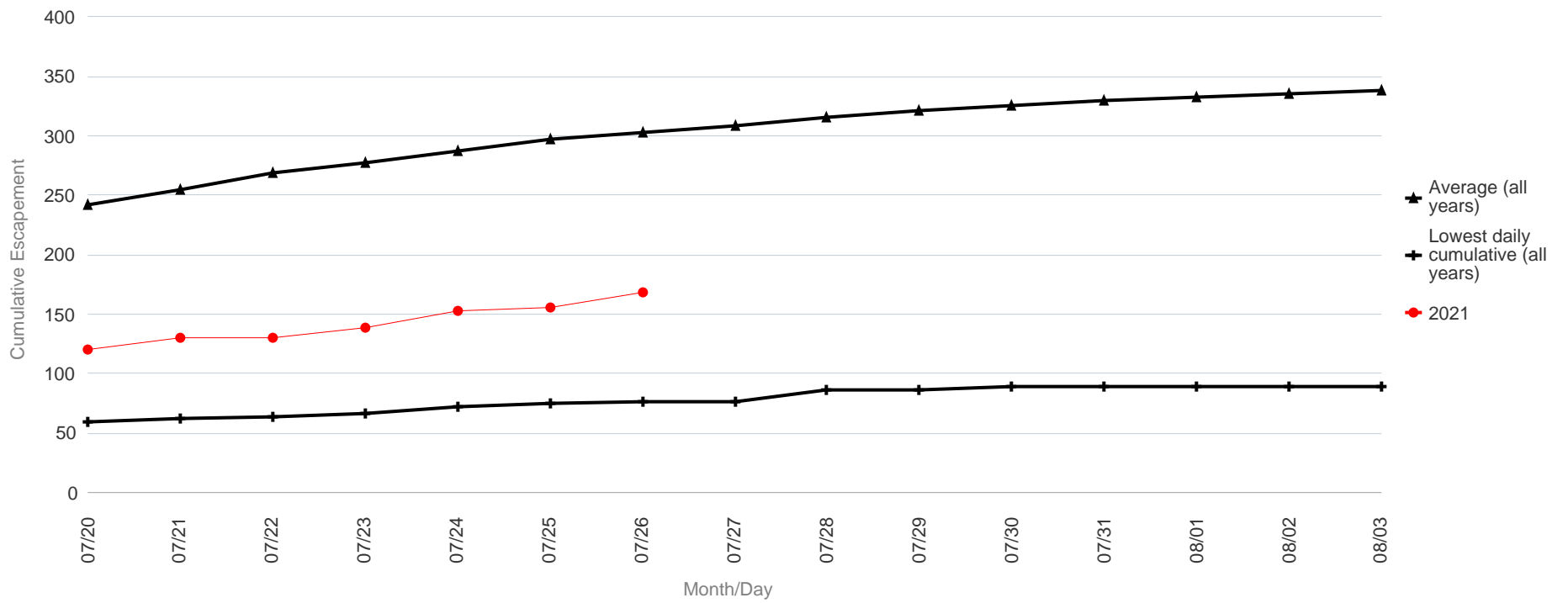


### Takotna River Salmon Monitoring Project Passage of Chinook Salmon

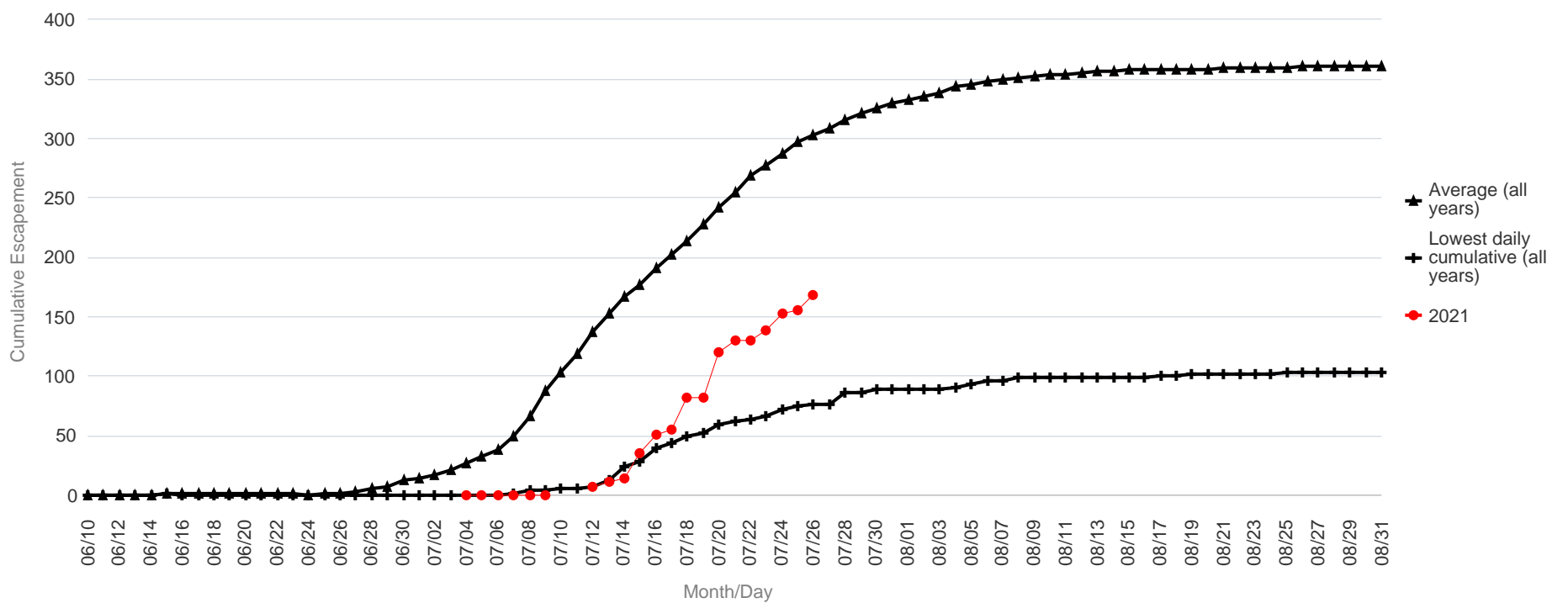
Date	Lowest daily cumulative (all years)	Average (all years)	2021
07/20	59	242	120
07/21	62	256	130
07/22	64	269	131
07/23	67	278	139
07/24	72	287	153
07/25	75	297	156
07/26	76	303	168
07/27	77	309	
07/28	86	315	
07/29	86	321	
07/30	89	326	
07/31	89	330	
08/01	89	333	
08/02	89	335	
08/03	89	339	

	Lowest Count	Average Count
Season Total	104	362

#### Focused Two-Week Data View



#### Season Total Overview

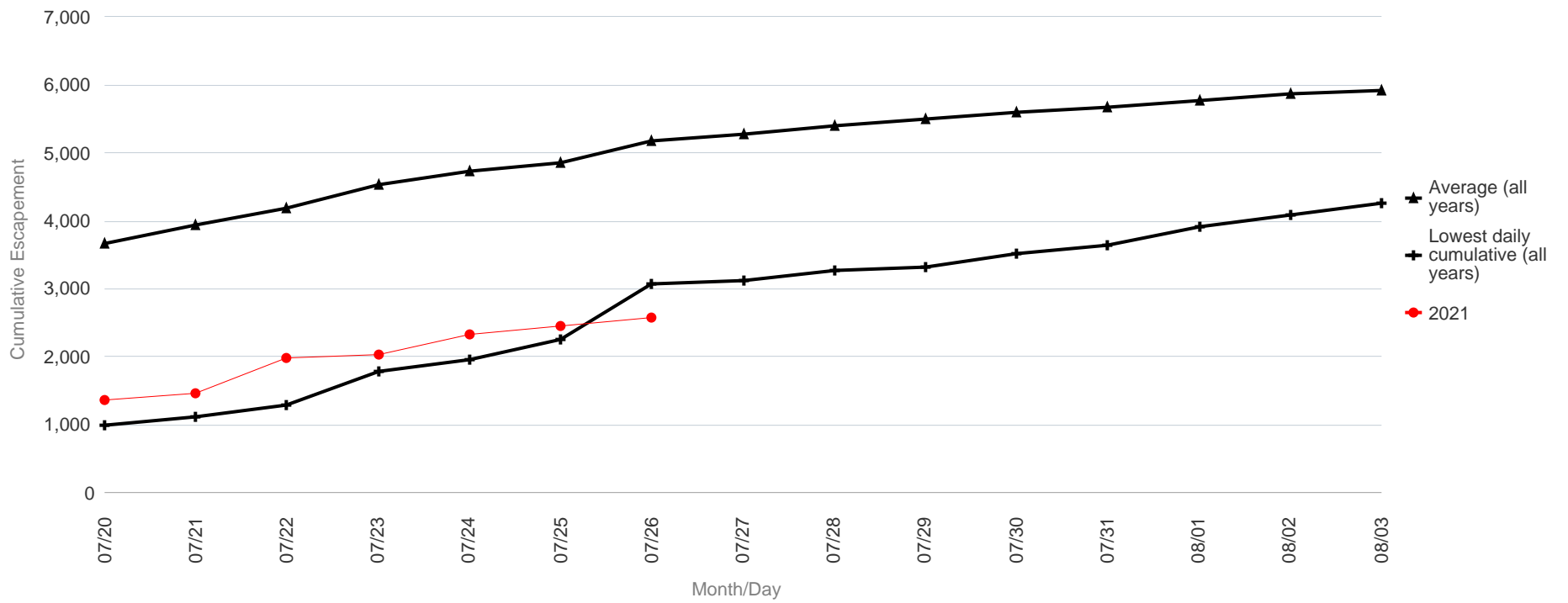


### Salmon River (Pitka Fork) Salmon Monitoring Project Passage of Chinook Salmon

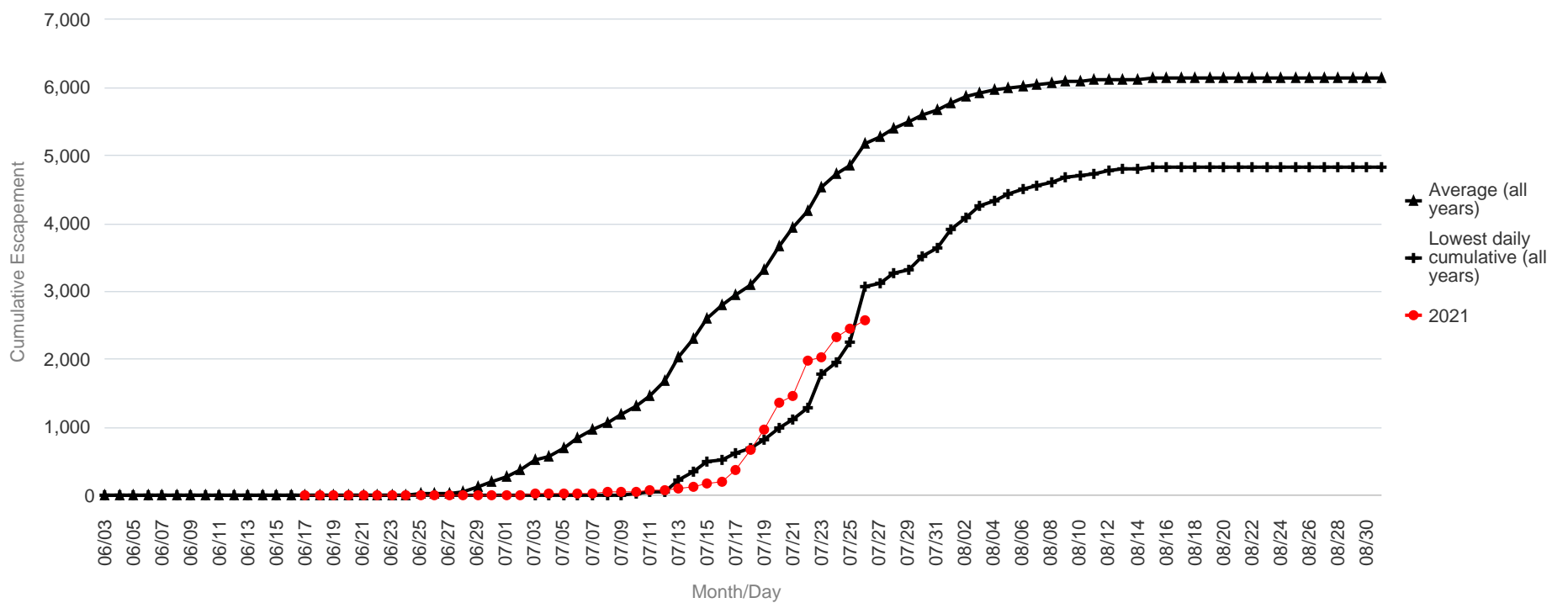
Date	Lowest daily cumulative (all years)	Average (all years)	2021
07/20	983	3,673	1,374
07/21	1,120	3,931	1,453
07/22	1,291	4,191	1,981
07/23	1,789	4,526	2,026
07/24	1,962	4,744	2,335
07/25	2,253	4,861	2,460
07/26	3,069	5,167	2,579
07/27	3,116	5,272	
07/28	3,267	5,412	
07/29	3,319	5,512	
07/30	3,520	5,592	
07/31	3,632	5,671	
08/01	3,916	5,780	
08/02	4,094	5,861	
08/03	4,257	5,925	

	Lowest Count	Average Count
Season Total	4,827	6,151

#### Focused Two-Week Data View



#### Season Total Overview

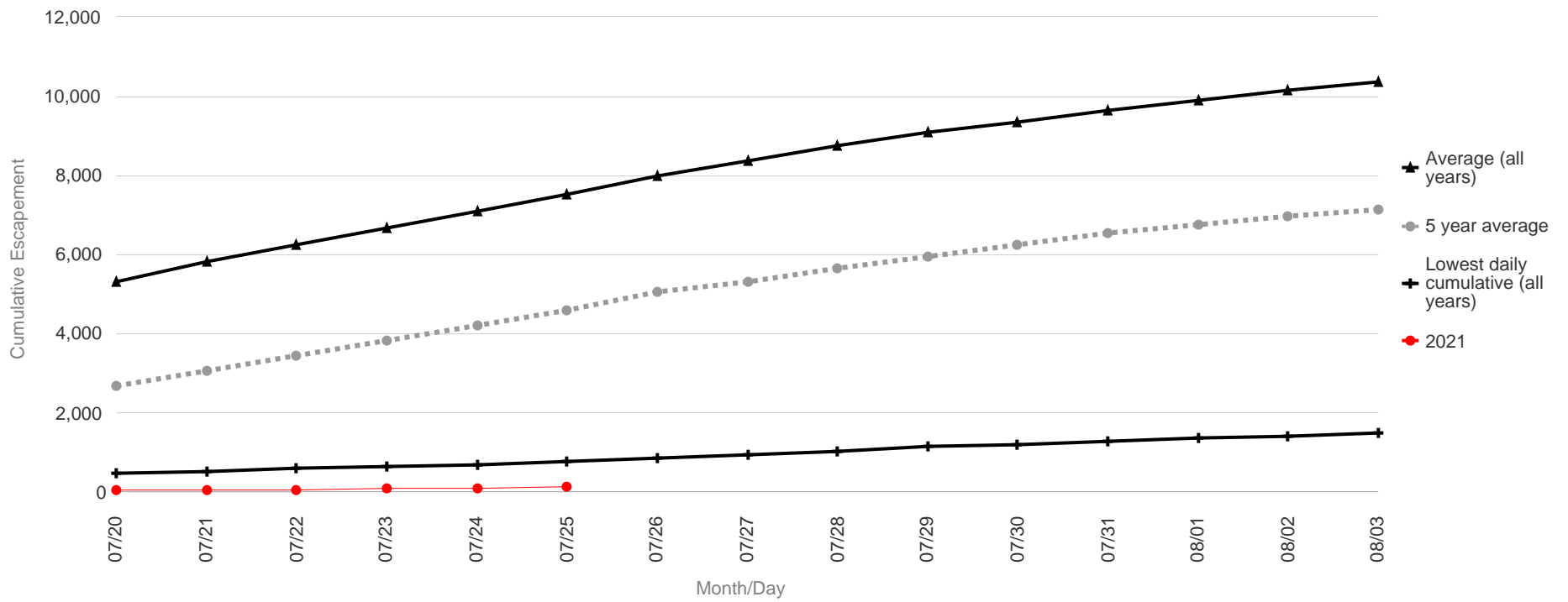


### Salmon River (Aniak) Salmon Monitoring Project Passage of Chum Salmon

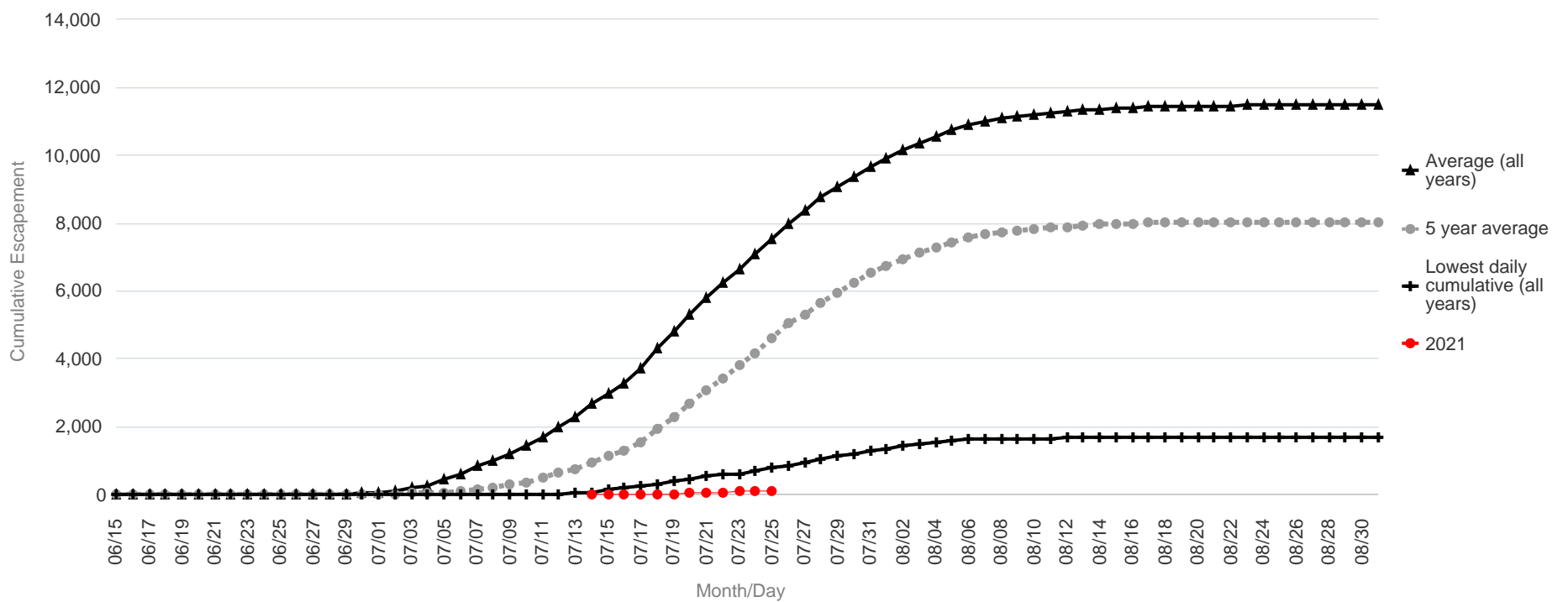
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	463	5,328	2,679	36
07/21	532	5,815	3,057	50
07/22	587	6,246	3,440	71
07/23	626	6,668	3,817	89
07/24	698	7,113	4,190	110
07/25	781	7,525	4,605	125
07/26	866	8,001	5,038	
07/27	940	8,360	5,324	
07/28	1,028	8,761	5,663	
07/29	1,133	9,092	5,954	
07/30	1,205	9,365	6,250	
07/31	1,298	9,654	6,541	
08/01	1,363	9,908	6,764	
08/02	1,427	10,152	6,961	
08/03	1,495	10,373	7,155	

	Lowest Count	Average Count	5 Year Average
Season Total	1,691	11,486	8,053

#### Focused Two-Week Data View



#### Season Total Overview

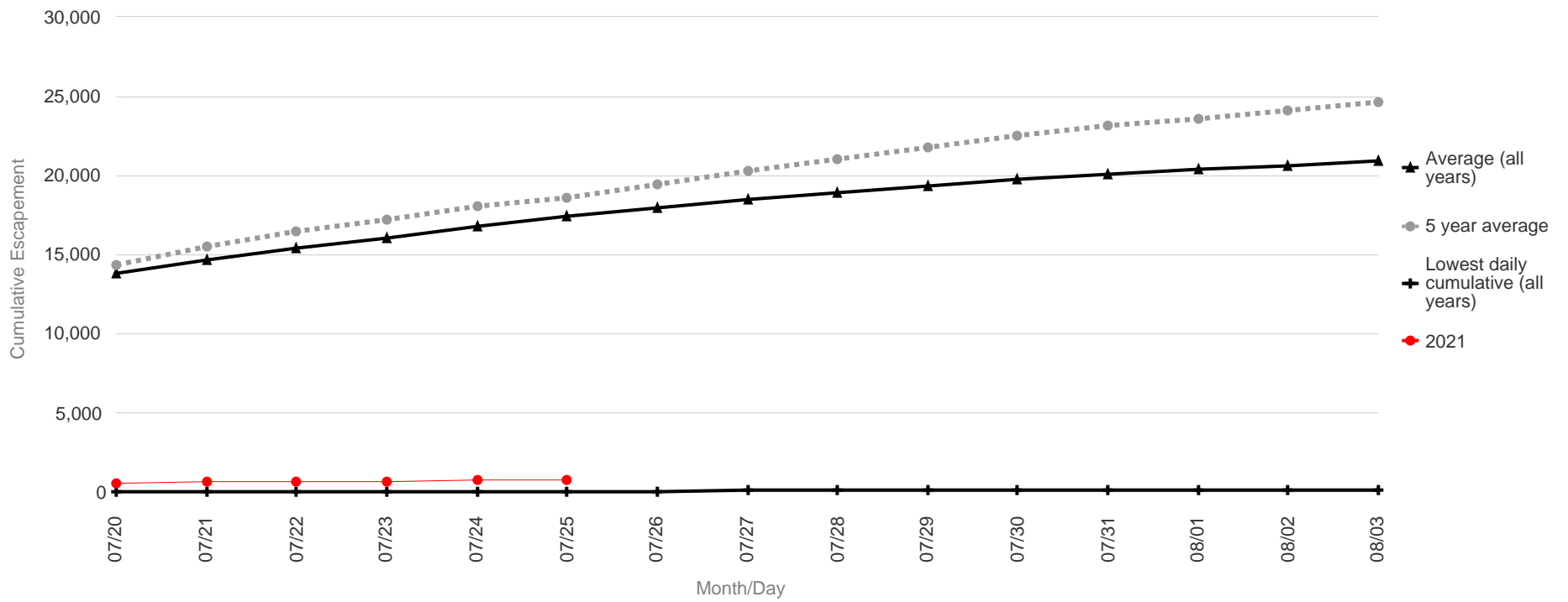


### George River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

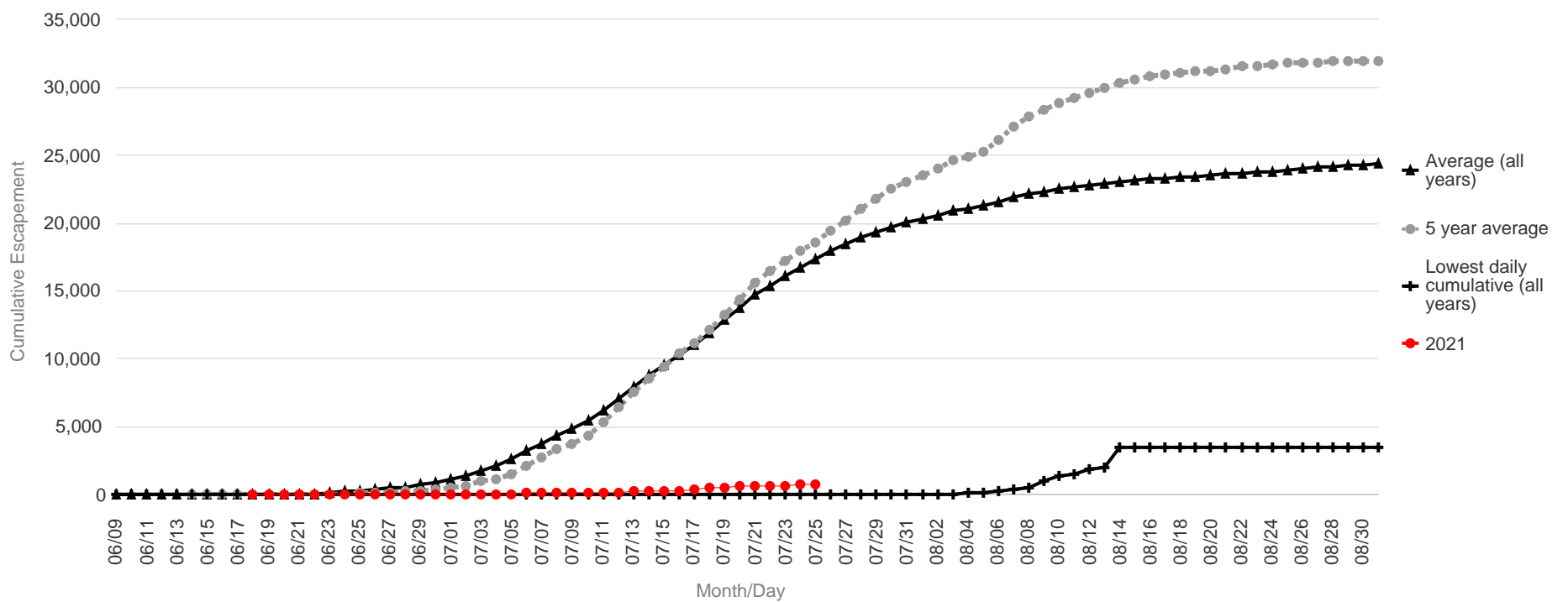
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	4	13,814	14,355	583
07/21	12	14,709	15,562	604
07/22	13	15,385	16,475	639
07/23	23	16,081	17,253	683
07/24	28	16,749	18,020	713
07/25	39	17,380	18,630	734
07/26	58	17,969	19,413	
07/27	80	18,496	20,257	
07/28	80	18,945	21,007	
07/29	80	19,370	21,810	
07/30	80	19,745	22,556	
07/31	80	20,070	23,102	
08/01	80	20,358	23,581	
08/02	80	20,627	24,062	
08/03	81	20,894	24,615	

	Lowest Count	Average Count	5 Year Average
Season Total	3,486	24,950	32,074

#### Focused Two-Week Data View



#### Season Total Overview



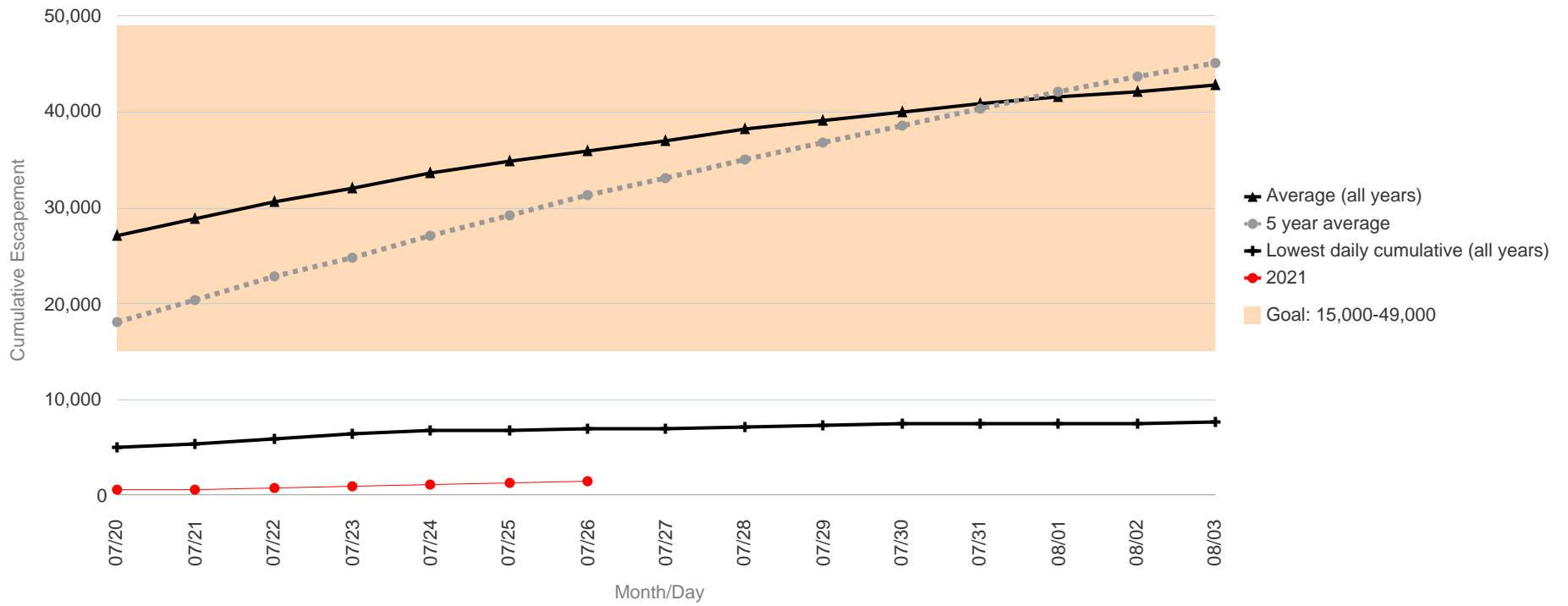
## Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

**Escapement Goal Range: 15,000 to 49,000**

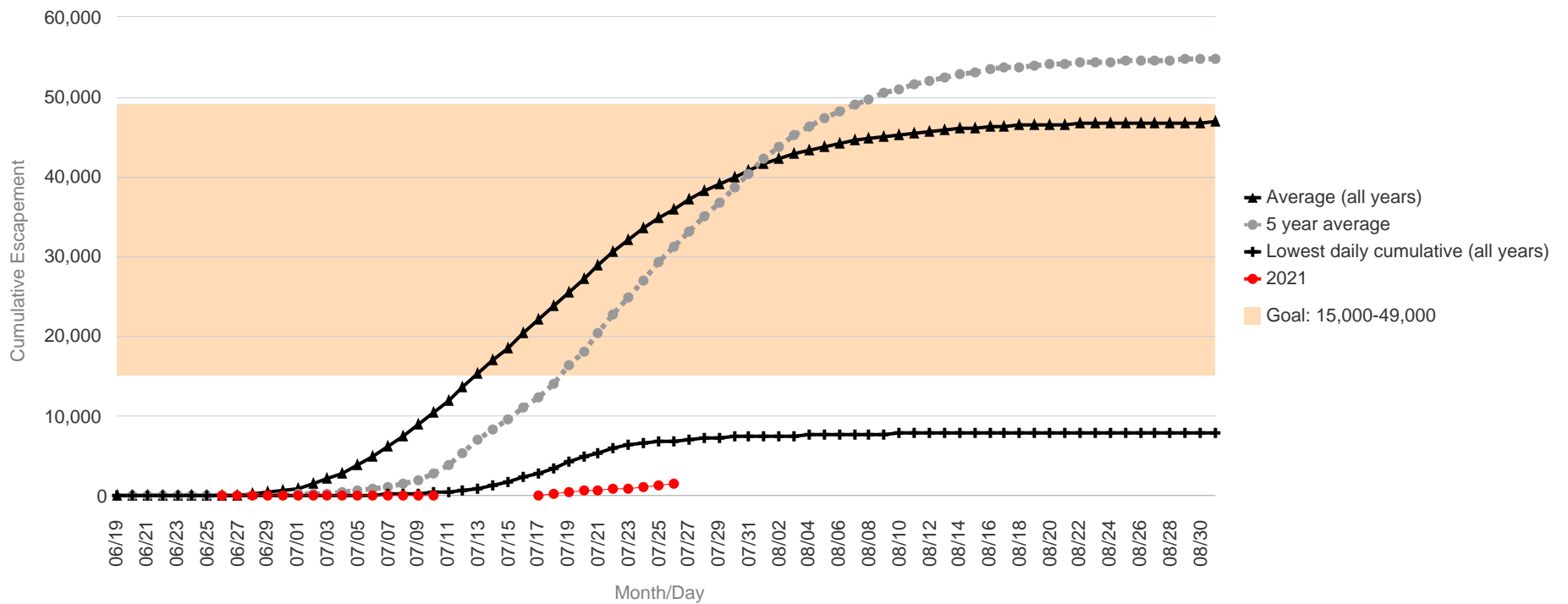
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	4,908	27,176	18,155	573
07/21	5,417	28,936	20,318	645
07/22	5,942	30,602	22,783	784
07/23	6,375	32,127	24,782	961
07/24	6,706	33,571	27,041	1,082
07/25	6,761	34,854	29,274	1,238
07/26	6,884	35,985	31,303	1,424
07/27	6,984	37,074	33,139	
07/28	7,176	38,203	35,016	
07/29	7,299	39,154	36,765	
07/30	7,376	40,016	38,619	
07/31	7,412	40,802	40,393	
08/01	7,460	41,528	42,186	
08/02	7,510	42,194	43,791	
08/03	7,566	42,799	45,144	

	Lowest Count	Average Count	5 Year Average
Season Total	7,957	46,858	54,815

### Focused Two-Week Data View



### Season Total Overview

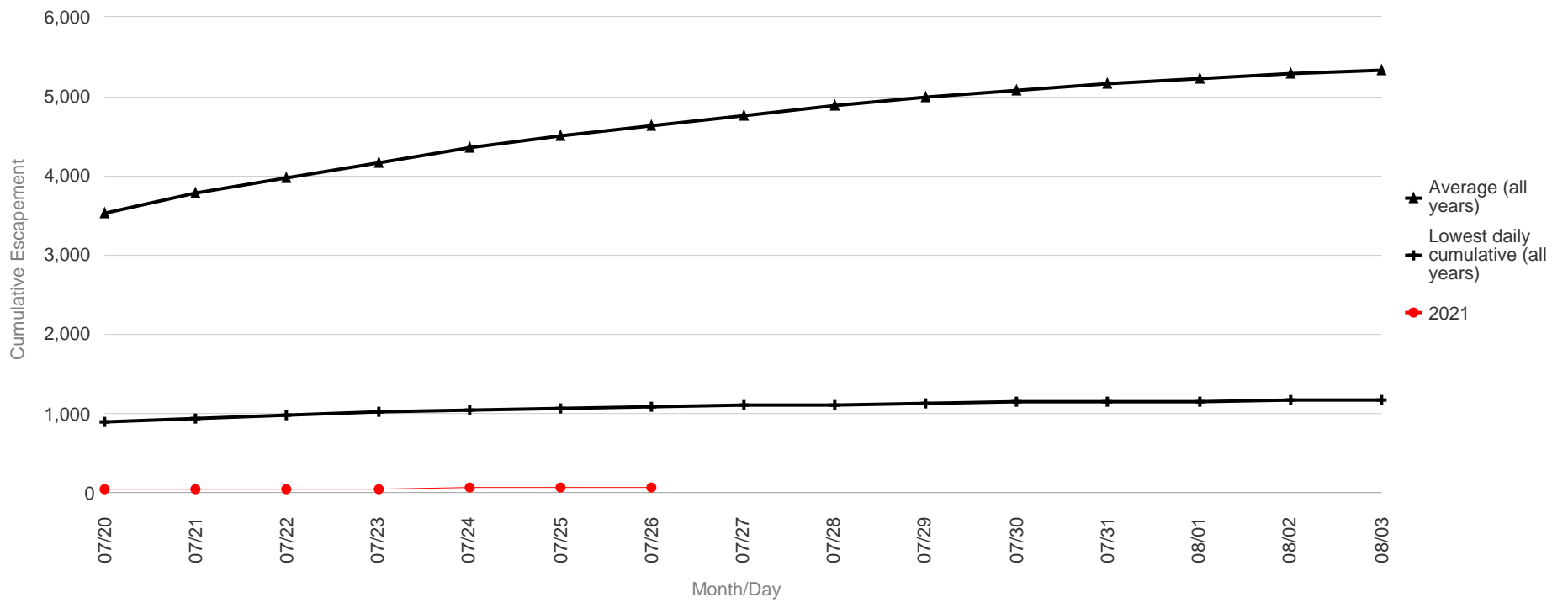


### Takotna River Salmon Monitoring Project Passage of Chum Salmon

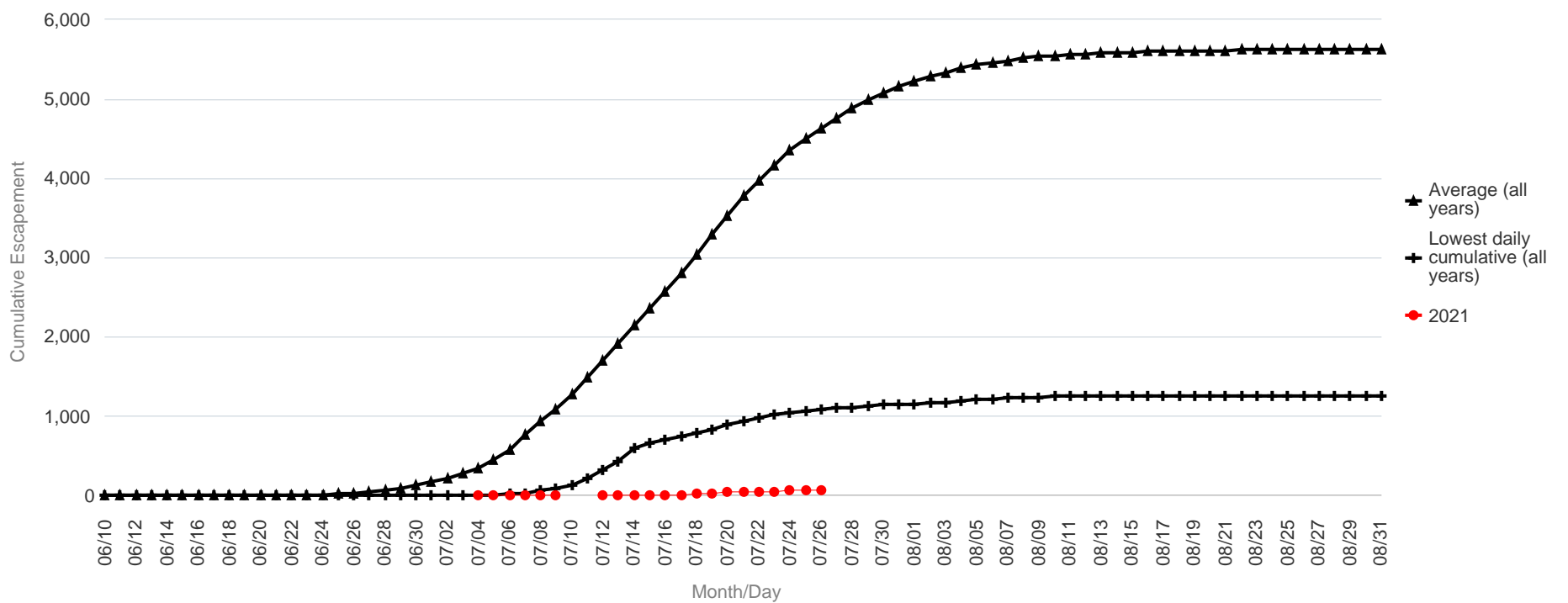
Date	Lowest daily cumulative (all years)	Average (all years)	2021
07/20	890	3,537	36
07/21	933	3,776	39
07/22	986	3,974	46
07/23	1,019	4,173	53
07/24	1,042	4,349	59
07/25	1,067	4,501	66
07/26	1,087	4,640	68
07/27	1,101	4,766	
07/28	1,112	4,889	
07/29	1,130	4,990	
07/30	1,142	5,076	
07/31	1,152	5,159	
08/01	1,155	5,221	
08/02	1,167	5,279	
08/03	1,169	5,334	

	Lowest Count	Average Count
Season Total	1,265	5,628

#### Focused Two-Week Data View



#### Season Total Overview



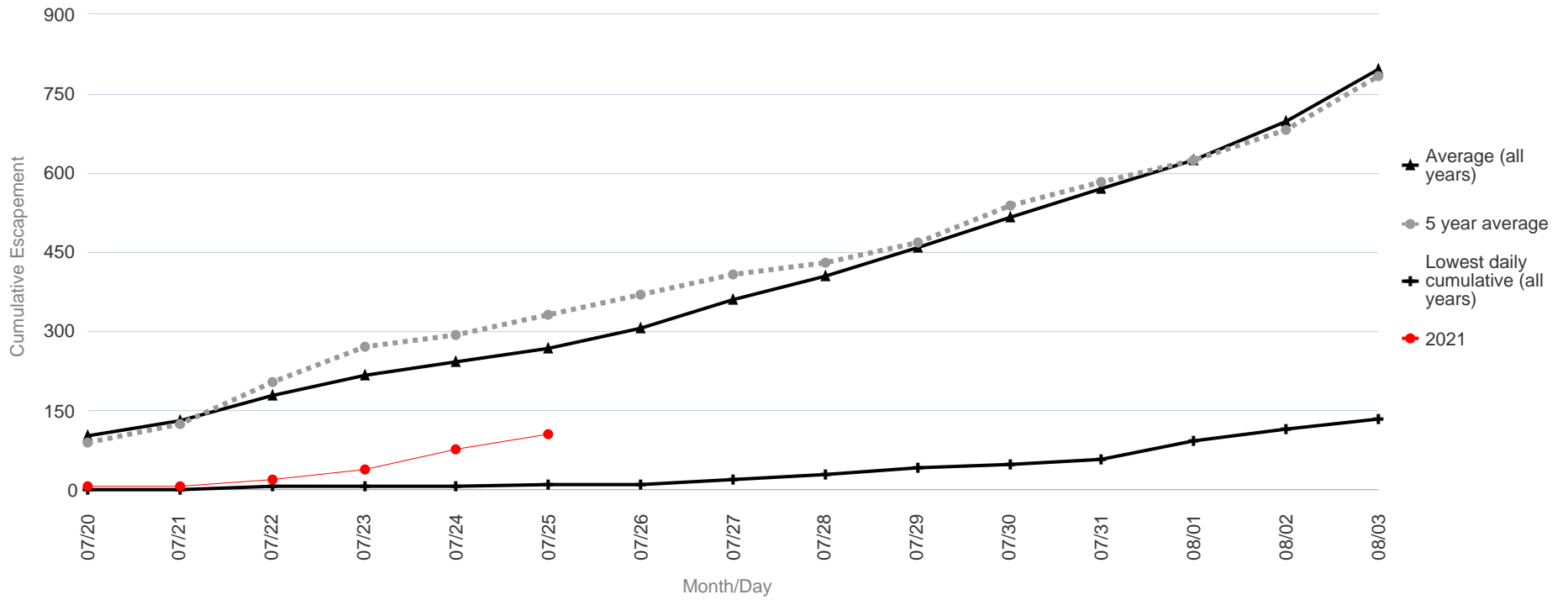


### Salmon River (Aniak) Salmon Monitoring Project Passage of Sockeye Salmon

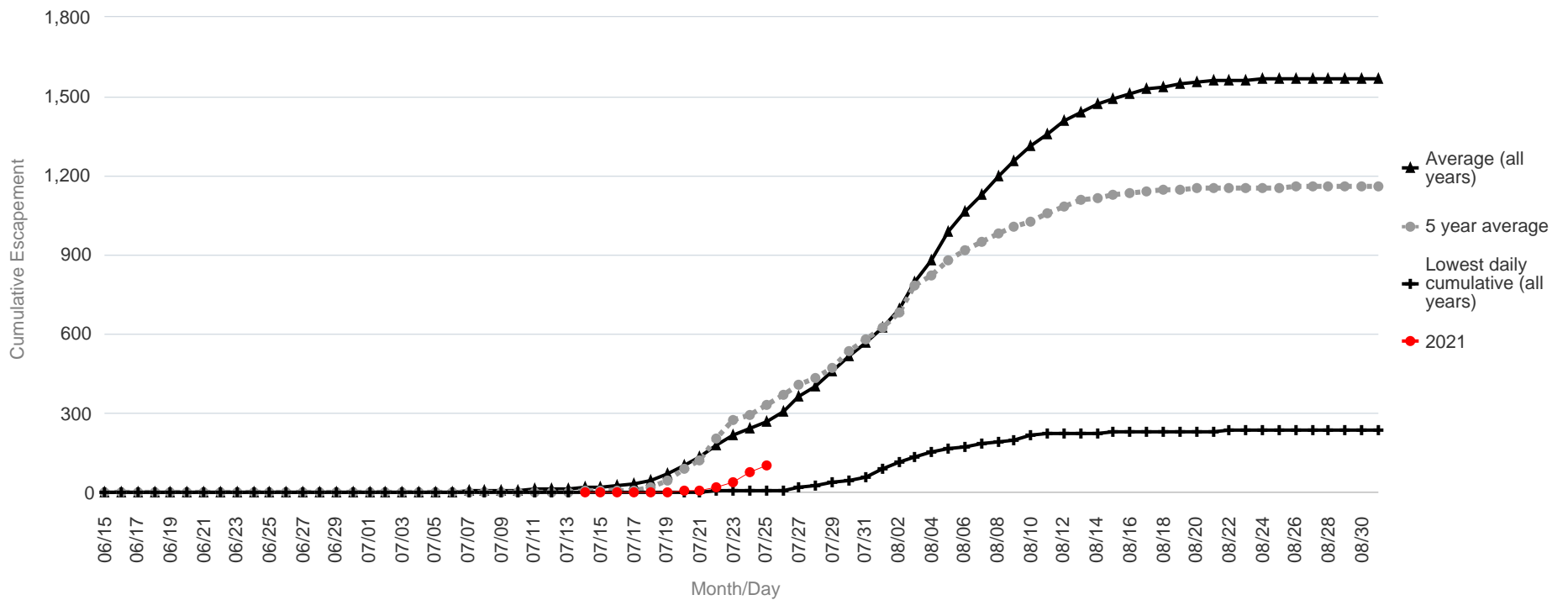
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	1	103	89	8
07/21	2	132	124	8
07/22	6	180	205	20
07/23	7	217	273	39
07/24	8	242	295	76
07/25	9	268	332	105
07/26	10	307	370	
07/27	20	361	410	
07/28	28	405	432	
07/29	41	458	470	
07/30	47	517	537	
07/31	57	570	583	
08/01	93	623	623	
08/02	114	698	682	
08/03	133	798	783	

	Lowest Count	Average Count	5 Year Average
Season Total	234	1,570	1,158

#### Focused Two-Week Data View



#### Season Total Overview



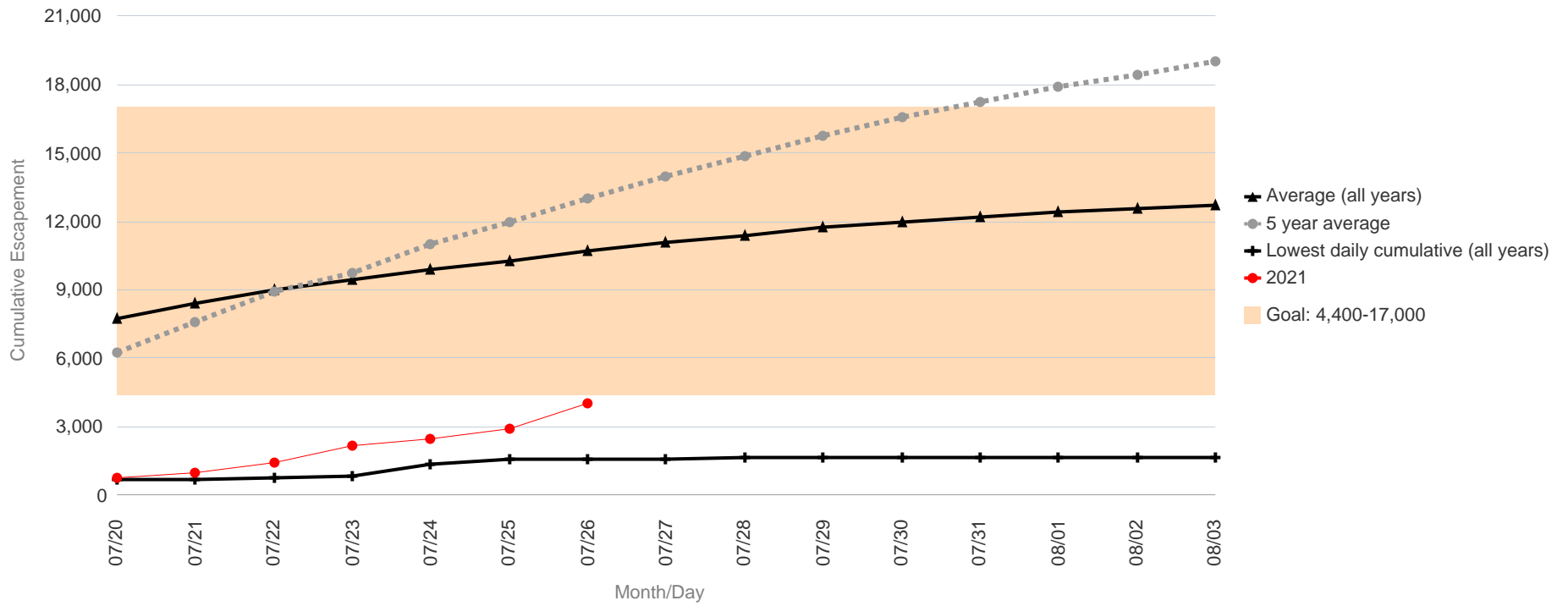
## Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

**Escapement Goal Range: 4,400 to 17,000**

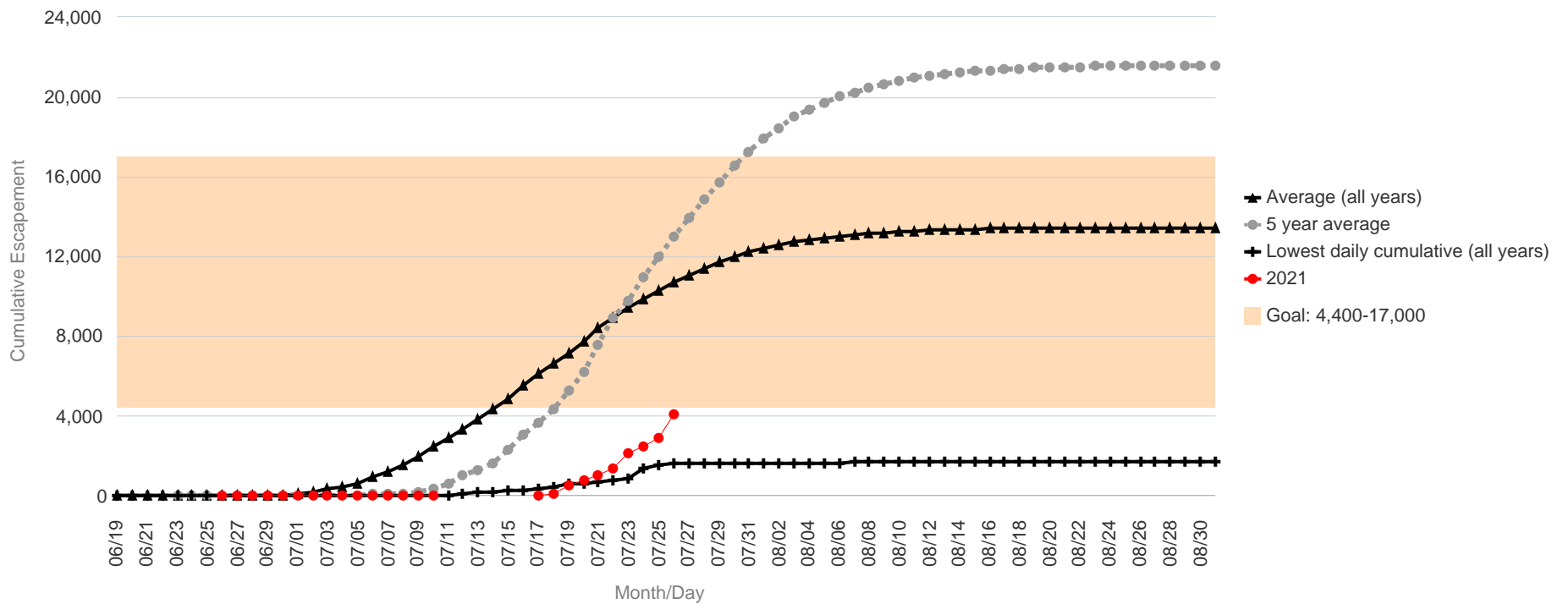
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	647	7,756	6,251	791
07/21	710	8,407	7,601	1,000
07/22	748	8,965	8,924	1,408
07/23	862	9,420	9,776	2,141
07/24	1,336	9,858	10,988	2,435
07/25	1,585	10,268	11,966	2,910
07/26	1,600	10,673	12,998	4,058
07/27	1,608	11,065	13,968	
07/28	1,623	11,410	14,886	
07/29	1,634	11,727	15,741	
07/30	1,642	11,998	16,607	
07/31	1,649	12,210	17,257	
08/01	1,651	12,401	17,937	
08/02	1,658	12,556	18,466	
08/03	1,663	12,706	19,000	

	Lowest Count	Average Count	5 Year Average
Season Total	1,676	13,469	21,638

### Focused Two-Week Data View



### Season Total Overview

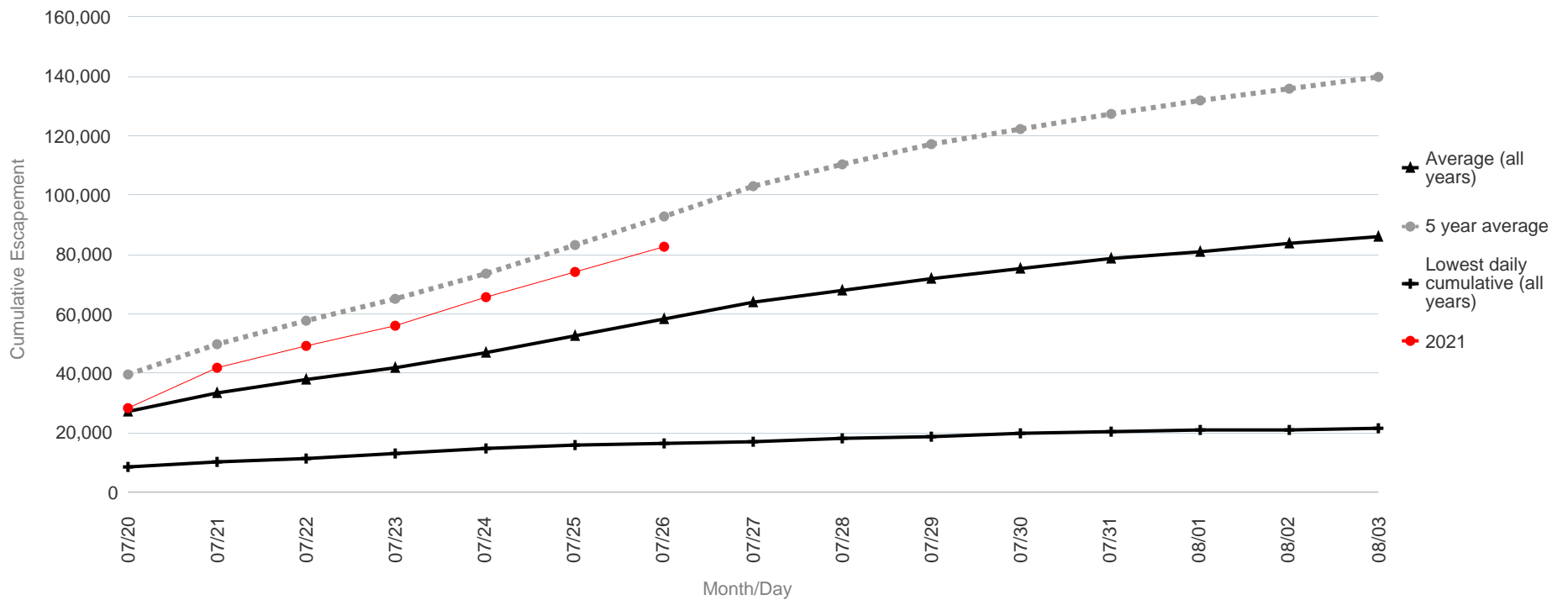


### Telaquana River Salmon Monitoring Project Passage of Sockeye Salmon

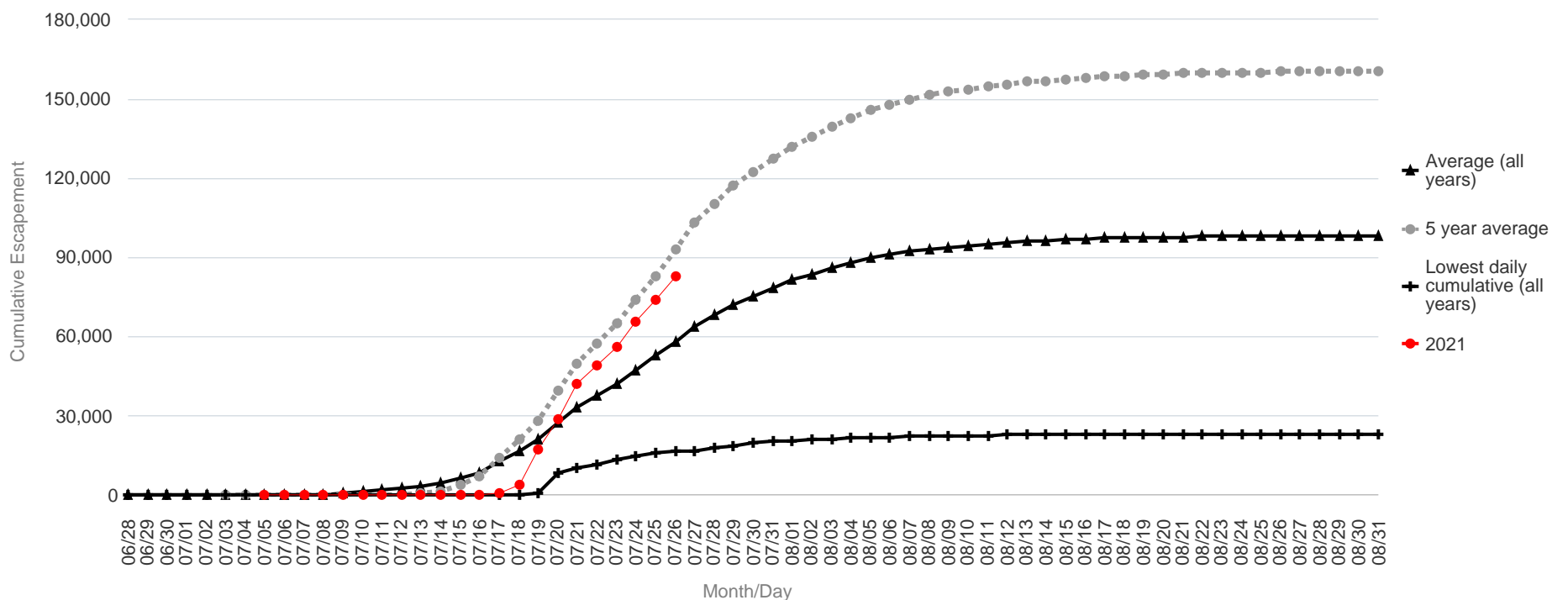
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2021
07/20	8,623	27,460	39,760	28,637
07/21	10,234	33,312	50,075	41,849
07/22	11,467	37,812	57,591	49,146
07/23	13,293	42,175	64,961	56,090
07/24	14,622	47,215	73,716	65,734
07/25	15,784	52,641	83,121	74,263
07/26	16,443	58,261	93,162	82,629
07/27	16,969	63,933	103,360	
07/28	17,964	68,157	110,542	
07/29	18,844	71,964	116,992	
07/30	19,887	75,157	122,095	
07/31	20,309	78,532	127,710	
08/01	20,778	81,306	132,033	
08/02	21,140	83,776	135,870	
08/03	21,382	86,133	139,600	

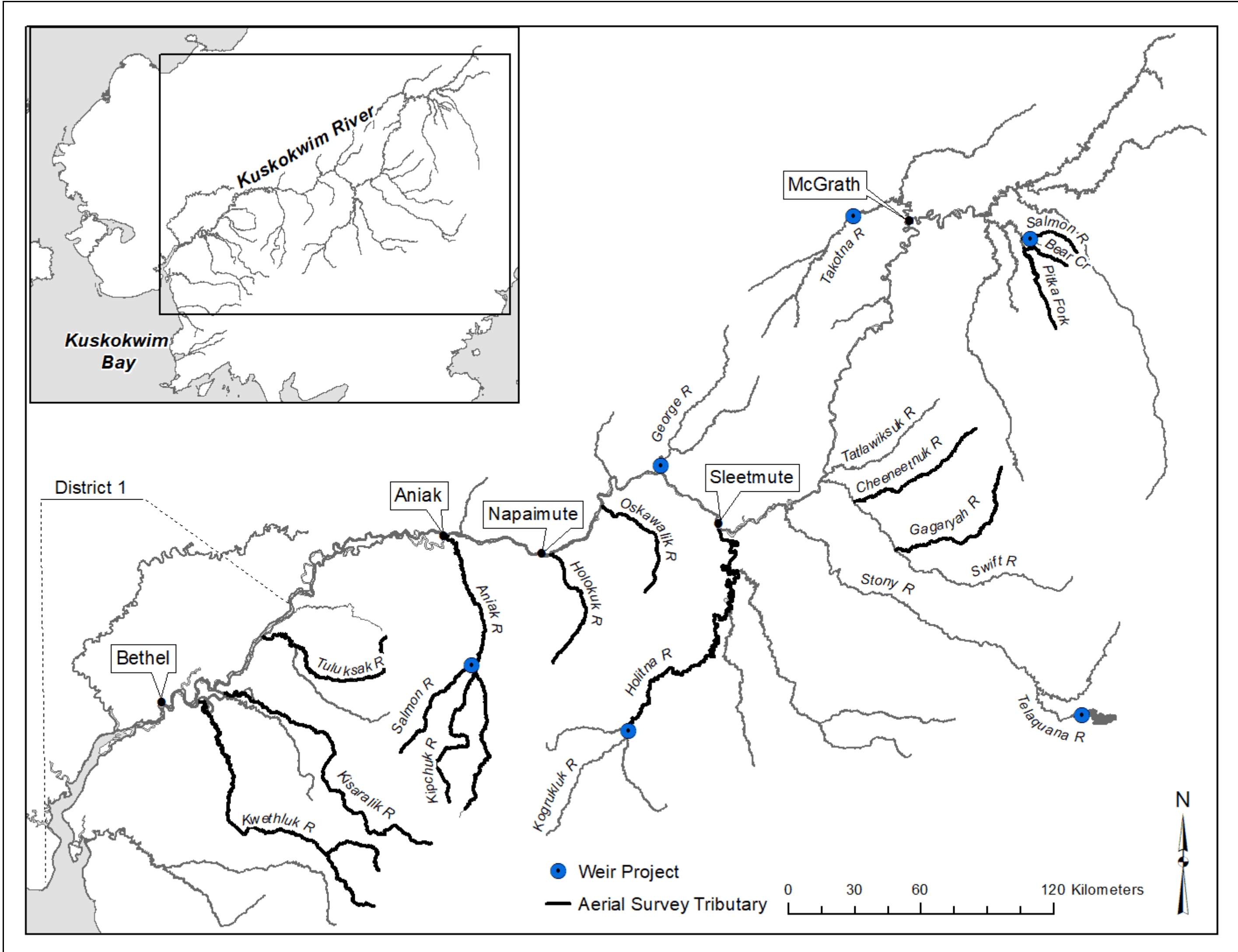
	Lowest Count	Average Count	5 Year Average
Season Total	23,007	98,127	160,271

#### Focused Two-Week Data View



#### Season Total Overview





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# Bering Sea Bycatch Update

Bycatch updated through July 22, 2021

- King salmon bycatch to date: **11,878** (all stocks)
- Non-king salmon bycatch to date: **137,052** (all stocks)

**Important: Kuskokwim River fish are a small component of the total bycatch.**

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## Background Information

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- Bycatch occurs in the Bering Sea and Aleutian Island (BSAI) groundfish fishery, which is managed by the National Marine Fisheries Service and is one of the most extensively monitored fisheries in the U.S.
- The 2011–2020<sup>1</sup> average king bycatch of all stocks is ~23,000
- The impact of bycatch on adult Kuskokwim River King salmon runs is small compared to other sources of mortality and does not explain the magnitude of declines we have observed on the Kuskokwim River.

We think this is true because:

- The Kuskokwim River is only one of many stocks that make up the total bycatch (other stocks range from California, Alaska, to Russia)
- The Kuskokwim River is one part of the Western Alaska stock group<sup>2</sup>, which makes up about 45%–70% of the total annual bycatch.
- Most of the bycatch is made up of juvenile fish, many of which would not have survived to adulthood due to natural mortality<sup>3</sup>.
- Of the fish that would have survived in they had not been caught, only subset of them would have returned this year because salmon spend a varying amount of time in ocean.

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## Helpful Links

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Bycatch numbers are reported by the National Marine Fisheries Service, available at: <https://alaskafisheries.noaa.gov/fisheries-catch-landings?tid=286>

Bycatch updates are reported by the North Pacific Fisheries Management Council, available at: <https://www.npfmc.org/bsai-salmon-bycatch/>

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<sup>1</sup> 2011–2020 is the recent 10-year average. In 2011, amendments to Fishery Management Plans were enacted to reduce King salmon bycatch in the BSAI Pollock fishery.

<sup>2</sup> The Western Alaska group includes Bristol Bay, Kuskokwim, Yukon, and Norton Sound stocks.

<sup>3</sup> It is estimated that about 90% of all salmon that enter the marine environment die of natural causes.

# **Kuskokwim River Salmon Management Working Group**

P.O. Box 1467 • Bethel, AK 99559 • 907-543-2433 • 907-543-2021 fax

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July 23, 2021

Mike Dunleavy, Governor  
Office of the Governor  
P.O. Box 110001  
Juneau, Alaska 99811-0001

Dear Governor Dunleavy,

The Kuskokwim River Salmon Management Working Group (KRSMWG) requested information regarding the interception of chum salmon bound for the Kuskokwim River in Area M commercial fisheries harvests at its meeting with Alaska Department of Fish and Game (ADF&G) staff on July 21, 2021. In short, we were told that we would have to reach out to ADF&G staff based in Kodiak ourselves to ask our questions as it was not fair to ask Kuskokwim Area staff to report on commercial fishing activities that occur elsewhere in Alaska, which is outside the scope of their job descriptions. To that end, we are writing to you to ask for your assistance in directing ADF&G to provide information regarding the interception of our Kuskokwim River chum salmon for commercial sales in the various fisheries that take place in Area M.

We understand that the Western Alaska Salmon Stock Identification Program (WASSIP) is no longer in operation, and that information resulting from that multi-partner effort is now quite dated. We understand that the South Unimak and Shumagin Islands June Salmon Management Plan (5 AAC 09.365) was designed by the Alaska Board of Fisheries to better manage the Area M commercial harvests of chum salmon bound for various spawning areas to mitigate the impacts of their interception to spawning tributaries such as the Kuskokwim River to avert chum salmon disasters that our river has experienced in the past. We understand that some of those original protections may no longer be in effect, or may have otherwise been revised to the extent that we are unsure as to what level our Kuskokwim River chum salmon may be intercepted by Area M commercial fishermen. We also understand that a decade or so ago, the abilities of the ADF&G Gene Conservation Laboratory to distinguish among Kuskokwim River chum salmon, Yukon River chum salmon, and other Western Alaska chum salmon stocks were limited. It is our hope that the significant funding that went into WASSIP has resulted in improvements in the State of Alaska's abilities to identify the specific chum salmon stocks being harvested for commercial purposes in Area M fisheries.

Now, that the Kuskokwim River and our neighbors in the Arctic-Yukon-Kuskokwim region are experiencing a second year of record low chum salmon returns, unprecedented salmon fishing restrictions, and compounded customary and traditional food security crises given the ongoing Chinook salmon conservation crises, our elder fishermen are raising significant concerns as to whether Area M or False Pass chum salmon interception could be contributing to the 2020 and 2021 disastrous returns to our river, as well as to our relatives and neighbors living on the Yukon River?

# **Kuskokwim River Salmon Management Working Group**

**P.O. Box 1467 • Bethel, AK 99559 • 907-543-2433 • 907-543-2021 fax**

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We are also contacting the Governor's Office to request more information regarding the role and impact of the Bering Sea bycatch of our Kuskokwim River Chinook salmon and Kuskokwim River chum salmon. This is a recurring agenda item at our weekly KRSMWG meetings; however, Kuskokwim Area ADF&G Commercial Fisheries Division staff are only able to look at the Bering Sea bycatch reports on-line and share that information with us. While Chinook salmon bycatch is specifically reported, the available information does not provide us with specific bycatch numbers for chum salmon. Again, the KRSMWG wishes to better understand the effect of bycatch of our Kuskokwim River chum salmon in the Bering Sea pollock commercial fishery where our salmon are supposed to be prohibited species. Therefore, we also are requesting your assistance in directing necessary ADF&G and/or federal staff to meet with the KRSMWG to provide an overview of existing information, data trends, on ongoing efforts to evaluate the impact of these interceptions on the returns of Chinook and chum salmon to the Kuskokwim River watershed.

In closing, we are specifically asking that the Governor's Office direct state officials and staff to bring the requested expertise and information related to the commercial fishing interceptions of our Kuskokwim River Chinook salmon and chum salmon in state-managed Area M commercial fisheries and to federal-managed Bering Sea pollock commercial fisheries to a meeting of the KRSMWG. We are highly dependent on these species to meet our priority customary and traditional uses and our food security and subsistence needs are not being met.

Sincerely,

KRSMWG Co-Chairs

[signatures – make sure to follow KRSMWG letter-writing policy]