

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: 08/25/2022

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, Lower River, Middle River, Upper River, Headwaters
- Overview of Kuskokwim River salmon run assessment:
 - a. Bethel Test Fishery:
 - b. Sonar and Weirs:
- Working Group KRITFC Representative Report:
- Commercial Catch Report: N/A
- Processor Report: N/A
- Sport Fish Report:
- 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:

NEW BUSINESS:

COMMENTS FROM WORKING GROUP MEMBERS:

NEXT MEETING DATE: _____ **Time:** _____ **Place:** _____

Informational Packet

Information Packets *ARE*:

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

Packets *ARE NOT*:

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

Please use this information responsibly:

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

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

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

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

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

Thank you,
Savannah Hollingworth
Working Group Coordinator

Kuskokwim River Salmon Assessment Update

8/24/2022



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

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

Table of Contents:

Bethel Test Fishery Summaries

- Page 2: [Coho Salmon](#)

Species Composition Summaries

- Page 3: [Percent Composition](#)

Appendices

- Page 4: [Sonar Passage Estimates](#)
- Page 5: [Chinook, Chum, and Sockeye Salmon Summaries](#)
- Page 6: [Coho Salmon Summary](#)

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>

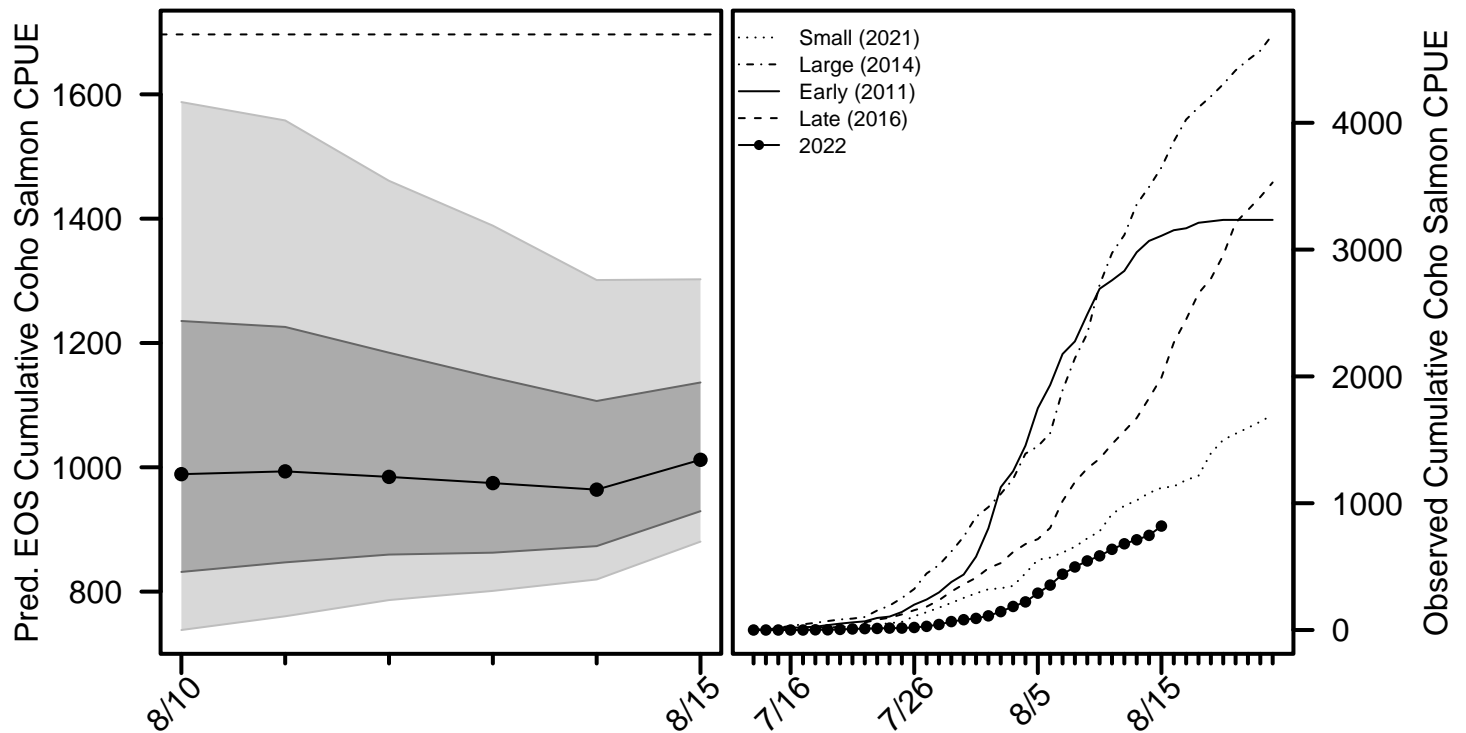
For the most up-to-date information regarding fishing opportunities please visit:

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

Coho Salmon BTF Summary (8/24)

- The BTF daily CPUE was **73**.
- The BTF cumulative CPUE is now **820**.
- **0%** years since 2008 fell below this cumulative CPUE on this date.
- **81%** of the run is complete based on historical average run timing.
- **72% - 88%** of the run is complete based the central 50% of all historical run timing scenarios.
- **8% - 19%** of the run is expected to pass Bethel in the next 5 days.
- Over the last 3 days, coho salmon made up **91%** of the BTF catches, compared to **97%** on average.

Coho 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 2021. *Right:* The cumulative BTF CPUE from 2022 plotted along with four previous years intended to represent a range of early/late and small/large index values.

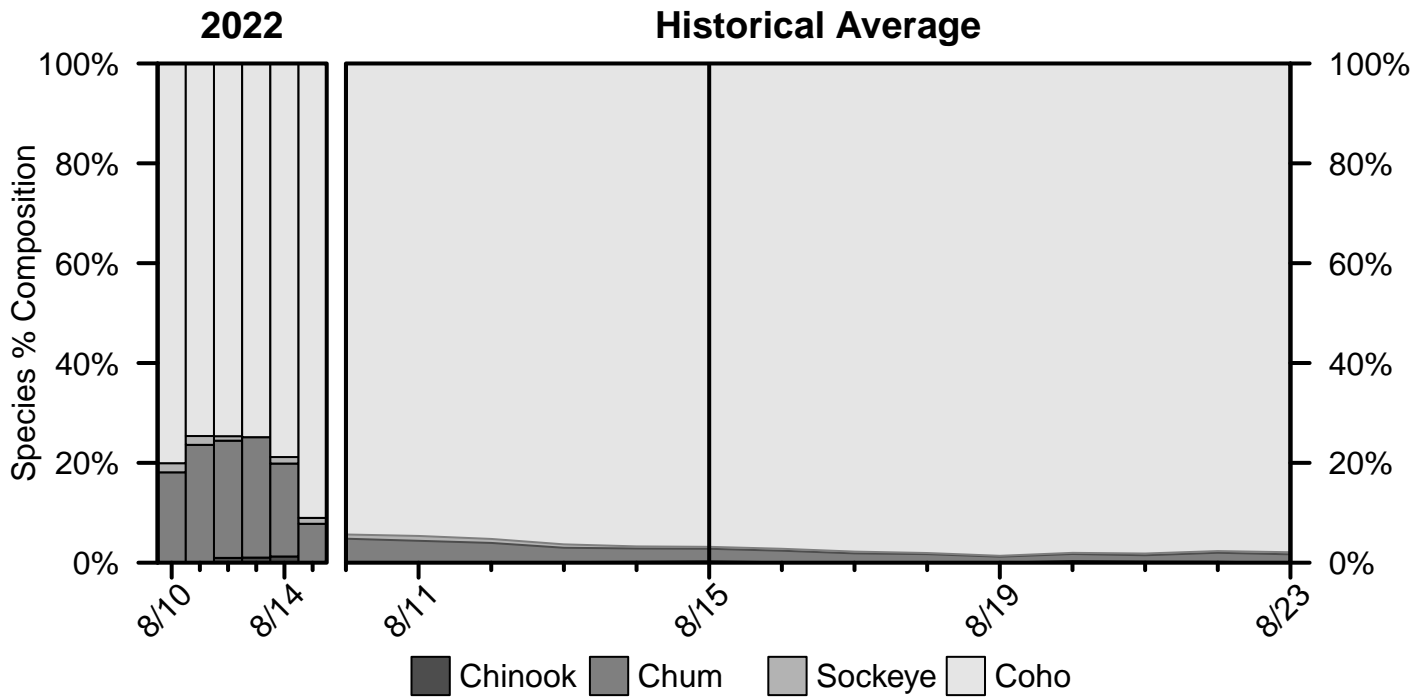


For more detailed information, see the [coho salmon appendix](#) at the end of this document.

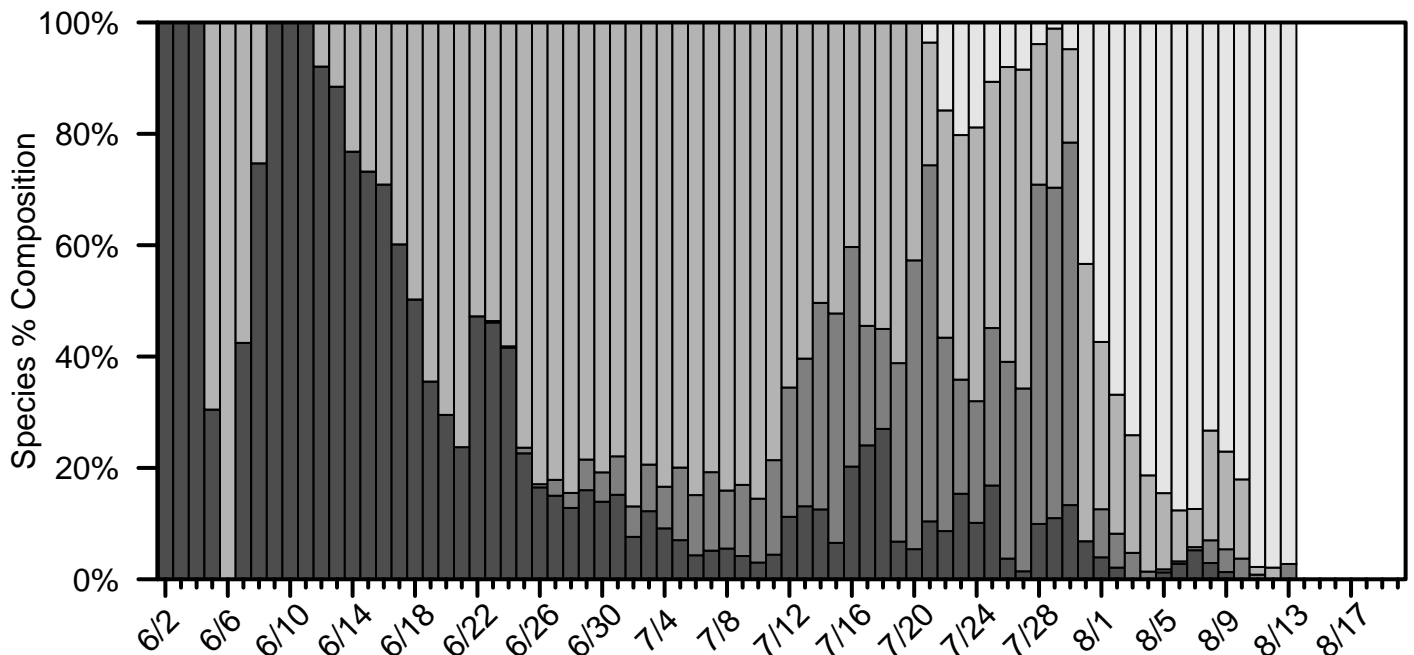
[Return to Table of Contents](#)

Percent Composition by Salmon Species

Percent Composition Figure 1. Species percent composition in the BTF from 2022 and based on the historical average. The composition presented on each day represents the average composition over the past 2 days.



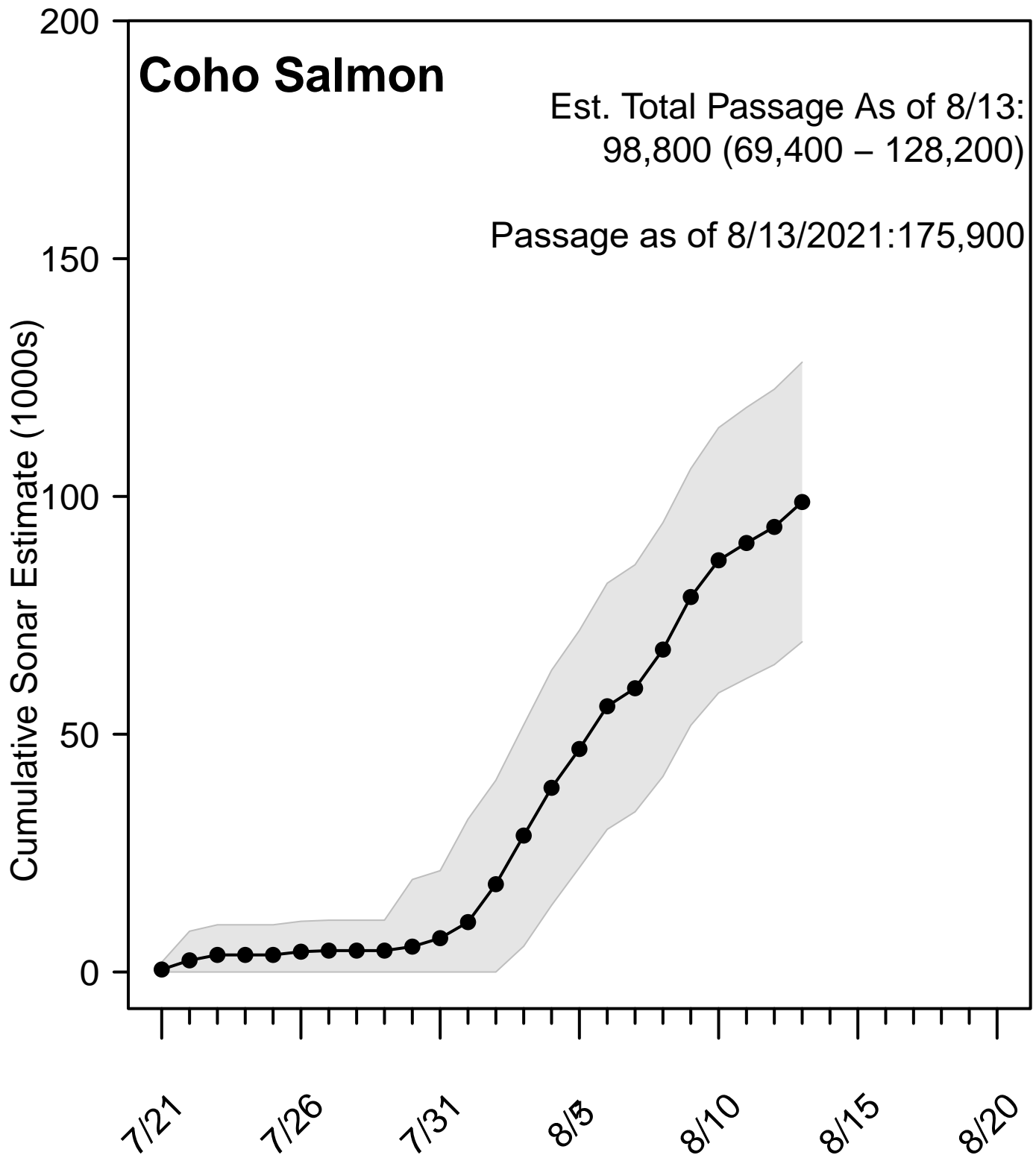
Species Composition Figure 2. Species percent composition from the sonar estimates from 2022 (salmon species only, excluding pink salmon). The composition presented on each day represents the average composition over the past 3 days.



[Return to Table of Contents](#)

Sonar Passage Estimates

Sonar Figure 1. Cumulative estimates of salmon passage from the 2022 sonar operation through the last complete reporting day. Grey bands show the 95% confidence intervals on each complete reporting day.



Chinook, Chum, and Sockeye Salmon Summaries

Chinook Salmon Summary

*** The BTF daily CPUE was **0** (cumulative: **504**).

*** The table below shows cumulative CPUE from the BTF from 2022 and in previous years.

Date	2022	2021	2020	2019	2018	5-Yr Avg.	2008 - 2021 Avg.
8/12	504	532	487	848	665	581	565
8/13	504	532	487	848	665	581	565
8/14	504	532	487	848	667	581	565
8/15	504	532	487	848	667	582	566
EOS		532	487	848	667	582	566

*** If the run ended on 8/15, 50% of the run would have passed BTF on **6/25**, which is **2 days later** than average.

*** The ATF ended operations on 7/12 with an EOS cumulative CPUE value of 1,277 for Chinook salmon, which was below the 2015-2021 average EOS cumulative CPUE of 2,609.

*** The cumulative Chinook salmon passage (95% CI) at the sonar, as of **8/13**, is **145,000 (115,000 - 175,000)** fish.

Chum Salmon Summary

*** The BTF daily CPUE was **3** (cumulative: **2,173**).

*** The table below shows cumulative CPUE from the BTF from 2022 and in previous years.

Date	2022	2021	2020	2019	2018	5-Yr Avg.	2008 - 2021 Avg.
8/12	2,162	327	1,428	6,272	8,193	4,595	5,801
8/13	2,168	327	1,430	6,293	8,198	4,601	5,806
8/14	2,170	327	1,438	6,330	8,204	4,611	5,812
8/15	2,173	327	1,438	6,349	8,206	4,616	5,815
EOS		327	1,442	6,427	8,212	4,639	5,832

*** If the run ended on 8/15, 50% of the run would have passed BTF on **7/17**, which is **11 days later** than average.

*** The ATF ended operations on 7/12 with an EOS cumulative CPUE value of 940 for chum salmon, which was below the 2015-2021 average EOS cumulative CPUE of 5,134.

*** The cumulative chum salmon passage (95% CI) at the sonar, as of **8/13**, is **101,700 (73,700 - 129,800)** fish.

Sockeye Salmon Summary

*** The BTF daily CPUE was **0** (cumulative: **1,372**).

*** The table below shows cumulative CPUE from the BTF from 2022 and in previous years.

Date	2022	2021	2020	2019	2018	5-Yr Avg.	2008 - 2021 Avg.
8/12	1,370	1,686	1,056	2,669	2,271	2,073	1,766
8/13	1,370	1,686	1,060	2,671	2,272	2,074	1,768
8/14	1,372	1,688	1,060	2,671	2,273	2,075	1,768
8/15	1,372	1,694	1,060	2,672	2,275	2,077	1,769
EOS		1,694	1,060	2,685	2,275	2,080	1,773

*** If the run ended on 8/15, 50% of the run would have passed BTF on **6/30**, which is average.

*** The ATF ended operations on 7/12 with an EOS cumulative CPUE value of 129 for sockeye salmon, which was below the 2017-2020 average EOS cumulative CPUE of 159.

*** The cumulative sockeye salmon passage (95% CI) at the sonar, as of **8/13**, is **605,100 (548,600 - 661,600)** fish.

[Return to Table of Contents](#)

Coho Salmon Summary

Coho Salmon Table A1. Cumulative CPUE from the BTF.

Date	2022	2021	2020	2019	2018	5-Yr Avg.	2008 - 2021 Avg.
8/12	680	980	921	828	600	1,000	1,890
8/13	711	1,022	992	914	677	1,084	2,005
8/14	746	1,081	1,067	1,075	759	1,183	2,112
8/15	820	1,122	1,140	1,169	853	1,252	2,201
8/16		1,132	1,216	1,291	901	1,330	2,324
8/17		1,183	1,293	1,379	901	1,394	2,427
8/18		1,217	1,406	1,447	901	1,477	2,521
EOS		1,696	1,822	1,801	901	1,893	2,923

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

Timing	Midpoint	8/15 Cumulative %
Earliest	7/29	97%
Early 10%	8/4	93%
Early 25%	8/6	88%
Median	8/8	81%
Late 25%	8/11	72%
Late 10%	8/13	63%
Latest	8/15	52%

[Return to Table of Contents](#)

Table of Contents

Kwethluk River Weir - Chinook Salmon (8/16/2022 8:01:03 PM).....	1
George River Weir - Chinook Salmon (8/16/2022 8:01:13 PM).....	2
Kogrukluk River Weir - Chinook Salmon (8/16/2022 8:01:25 PM).....	3
Kwethluk River Weir - Chum Salmon (8/16/2022 8:01:35 PM).....	4
George River Weir - Chum Salmon (8/16/2022 8:01:49 PM).....	5
Kogrukluk River Weir - Chum Salmon (8/16/2022 8:02:00 PM).....	6
Kwethluk River Weir - Sockeye Salmon (8/16/2022 8:02:12 PM).....	7
Kogrukluk River Weir - Sockeye Salmon (8/16/2022 8:02:24 PM).....	8
Telaquana River Weir - Sockeye Salmon (8/16/2022 8:02:34 PM).....	9
Kwethluk River Weir - Coho Salmon (8/16/2022 8:02:44 PM).....	10
George River Weir - Coho Salmon (8/16/2022 8:02:59 PM).....	11
Kogrukluk River Weir - Coho Salmon (8/16/2022 8:03:08 PM).....	12
Escapement Project Map (8/16/2022 8:03:19 PM).....	13

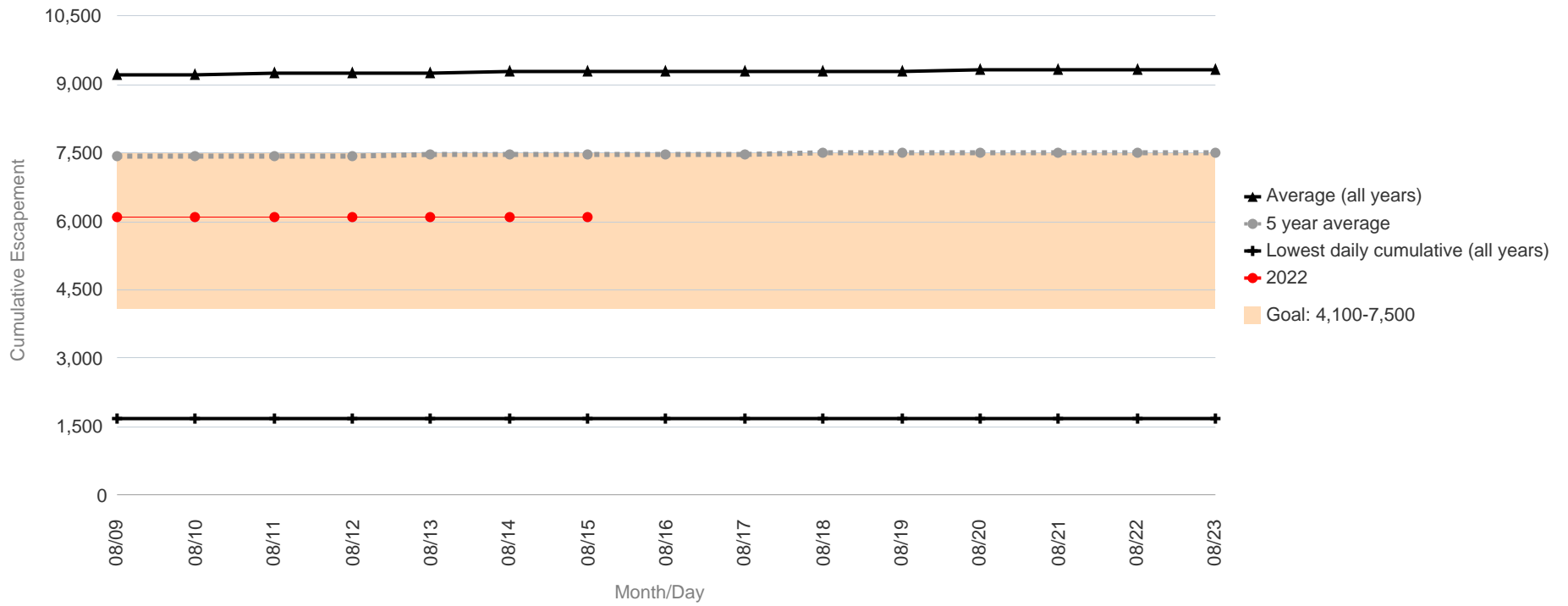
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,100 to 7,500

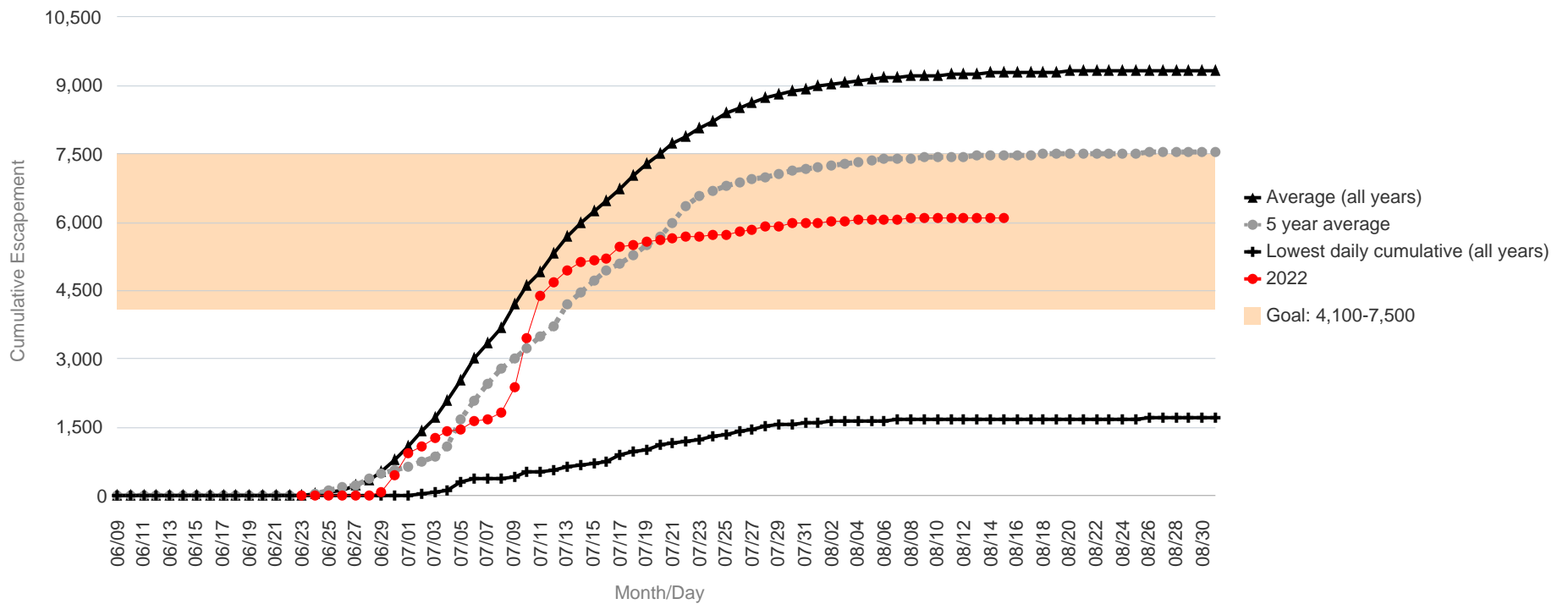
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,674	9,221	7,424	6,086
08/10	1,675	9,231	7,430	6,087
08/11	1,676	9,241	7,439	6,088
08/12	1,679	9,251	7,446	6,089
08/13	1,680	9,269	7,457	6,092
08/14	1,680	9,280	7,464	6,105
08/15	1,681	9,286	7,470	6,116
08/16	1,683	9,291	7,477	
08/17	1,685	9,297	7,485	
08/18	1,686	9,303	7,492	
08/19	1,687	9,308	7,496	
08/20	1,688	9,312	7,506	
08/21	1,689	9,315	7,510	
08/22	1,690	9,318	7,515	
08/23	1,691	9,320	7,521	

	Lowest Count	Average Count	5 Year Average
Season Total	1,716	9,334	7,540

Focused Two-Week Data View



Season Total Overview



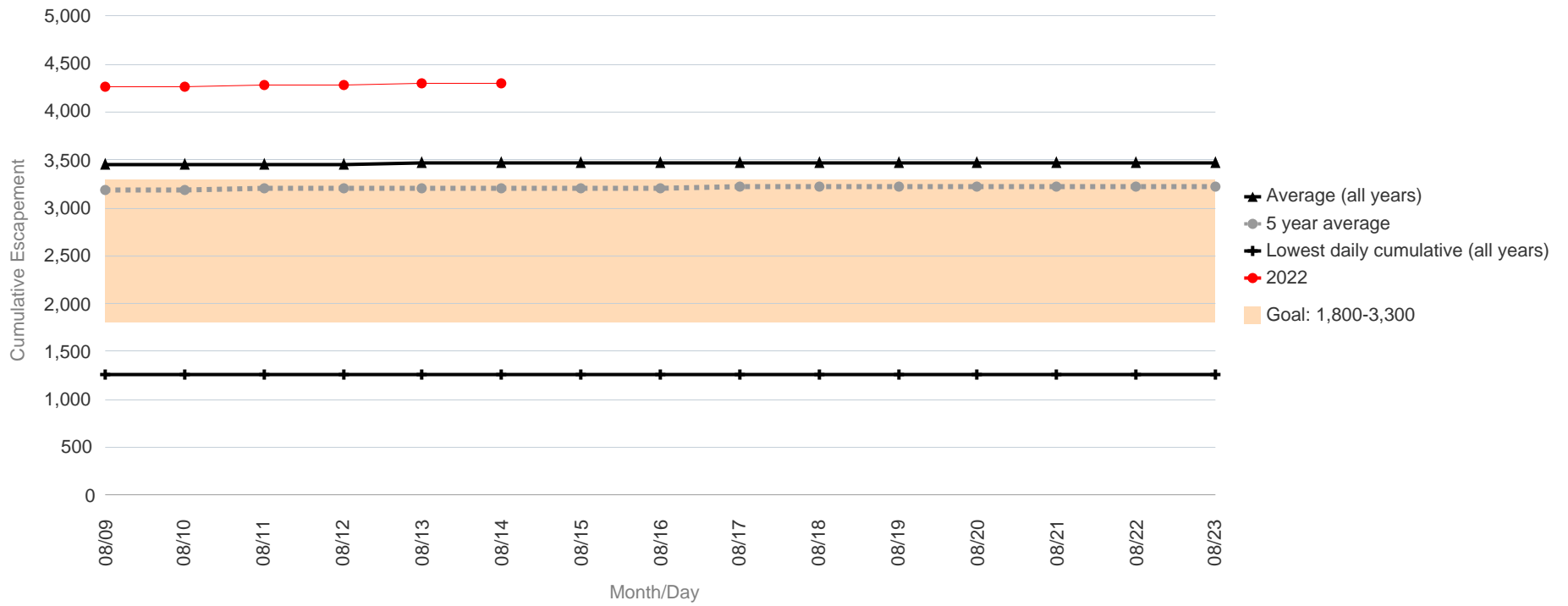
George River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 1,800 to 3,300

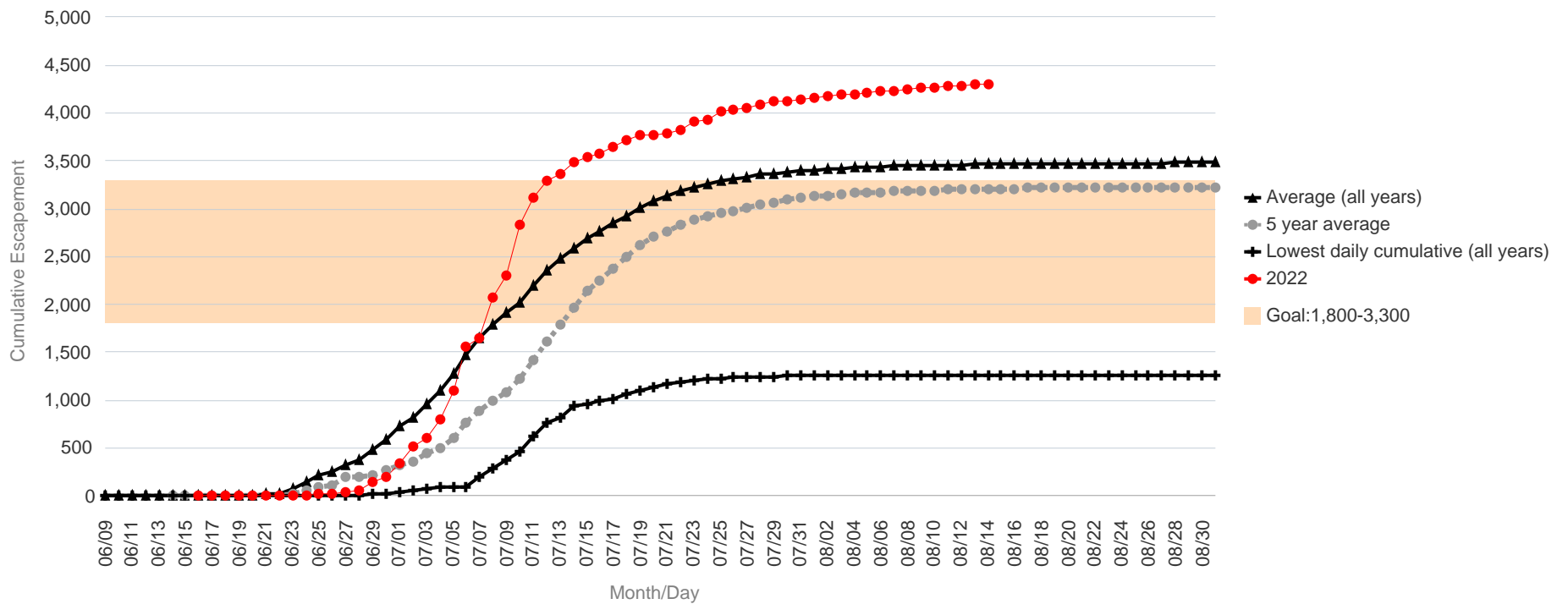
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,260	3,451	3,191	4,258
08/10	1,260	3,454	3,194	4,270
08/11	1,261	3,458	3,198	4,280
08/12	1,263	3,460	3,200	4,290
08/13	1,263	3,462	3,202	4,294
08/14	1,263	3,465	3,205	4,299
08/15	1,263	3,467	3,208	
08/16	1,263	3,469	3,211	
08/17	1,265	3,471	3,213	
08/18	1,265	3,472	3,217	
08/19	1,265	3,474	3,219	
08/20	1,265	3,475	3,220	
08/21	1,266	3,476	3,223	
08/22	1,266	3,476	3,225	
08/23	1,267	3,477	3,225	

	Lowest Count	Average Count	5 Year Average
Season Total	1,267	3,480	3,231

Focused Two-Week Data View



Season Total Overview



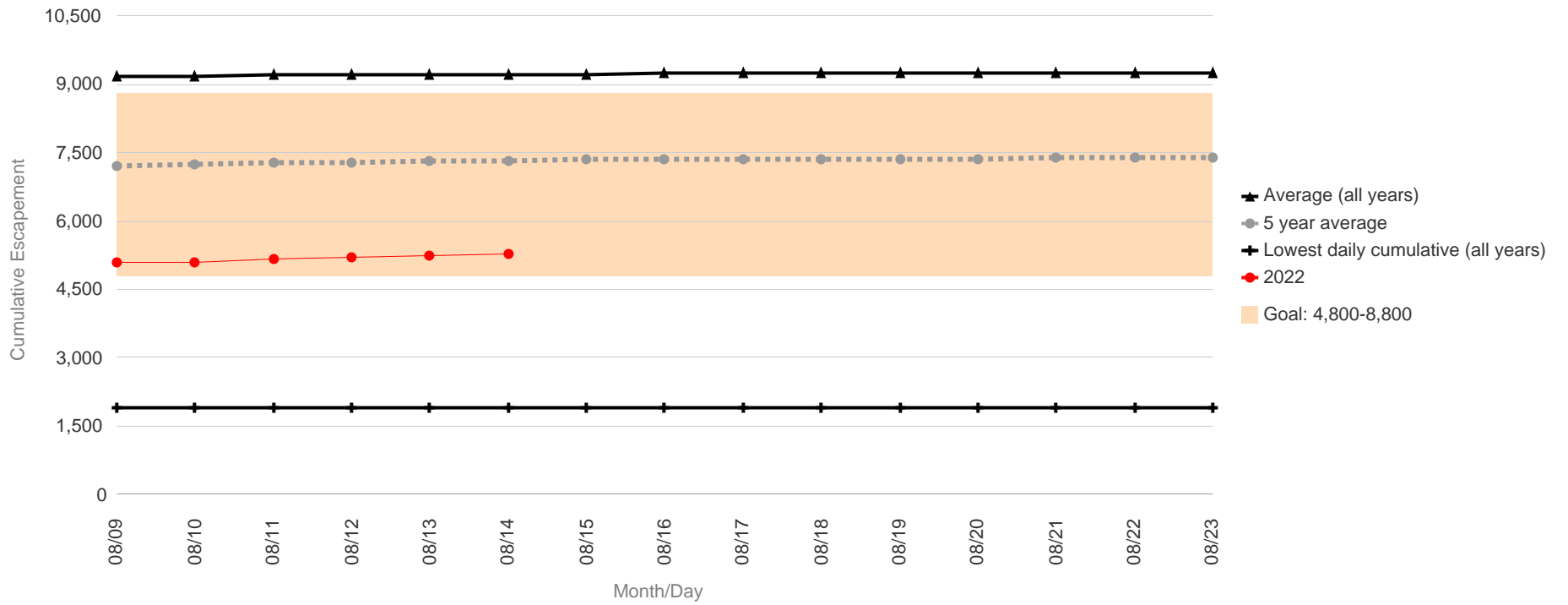
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chinook Salmon

Escapement Goal Range: 4,800 to 8,800

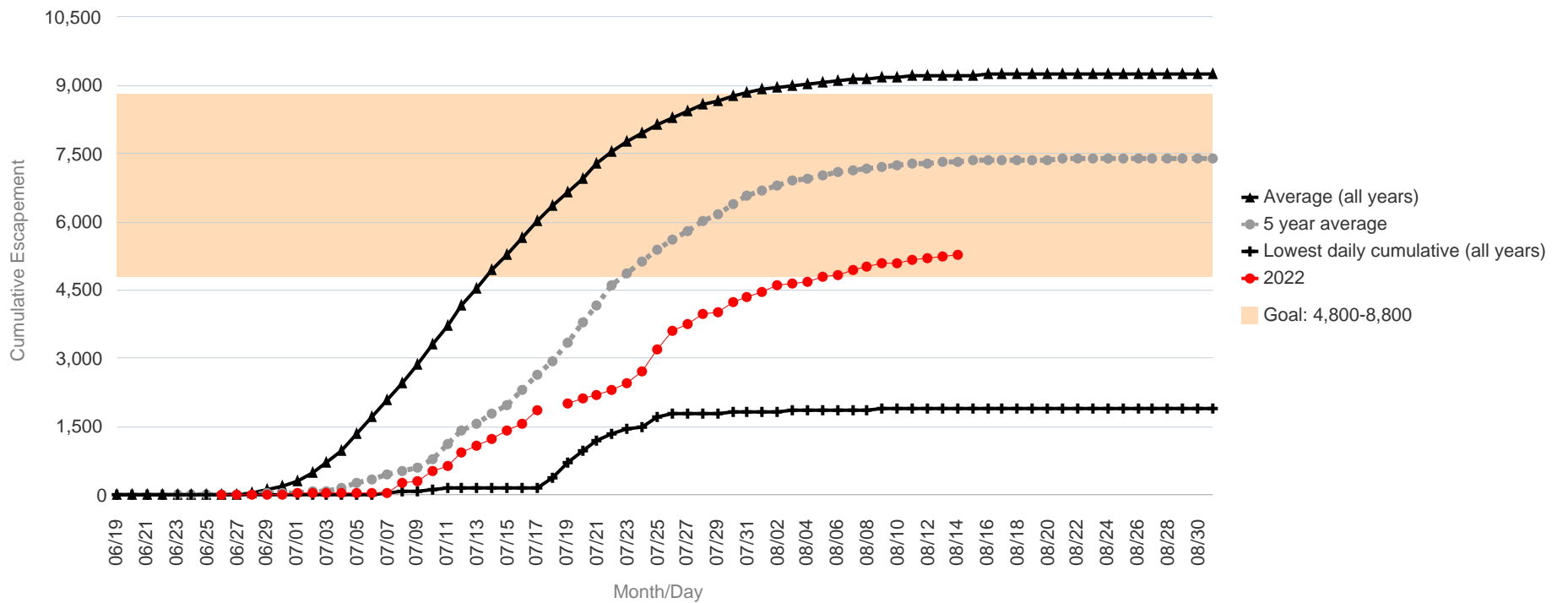
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,887	9,171	7,229	5,078
08/10	1,892	9,186	7,255	5,091
08/11	1,896	9,199	7,283	5,175
08/12	1,899	9,209	7,303	5,207
08/13	1,902	9,219	7,323	5,245
08/14	1,904	9,226	7,338	5,269
08/15	1,906	9,232	7,348	
08/16	1,908	9,237	7,357	
08/17	1,910	9,241	7,363	
08/18	1,911	9,245	7,369	
08/19	1,912	9,248	7,374	
08/20	1,913	9,251	7,378	
08/21	1,914	9,254	7,380	
08/22	1,916	9,256	7,383	
08/23	1,916	9,257	7,386	

	Lowest Count	Average Count	5 Year Average
Season Total	1,919	9,270	7,401

Focused Two-Week Data View



Season Total Overview

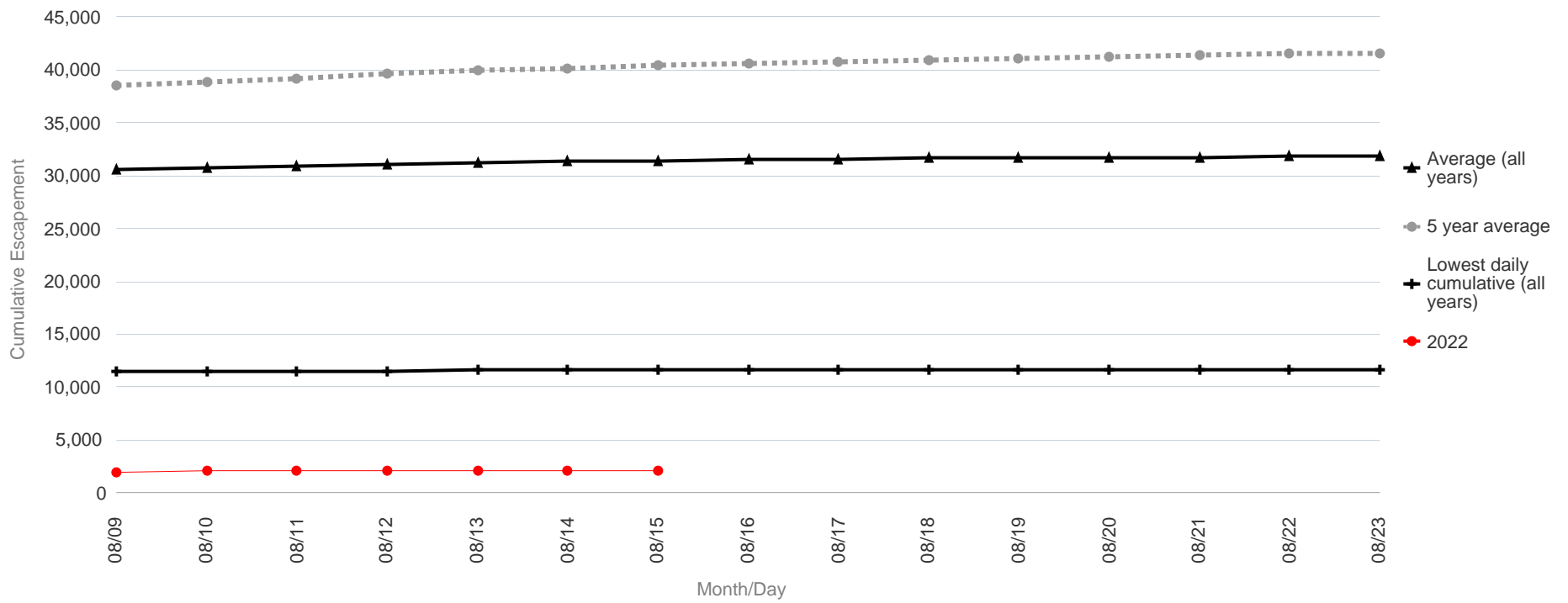


Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

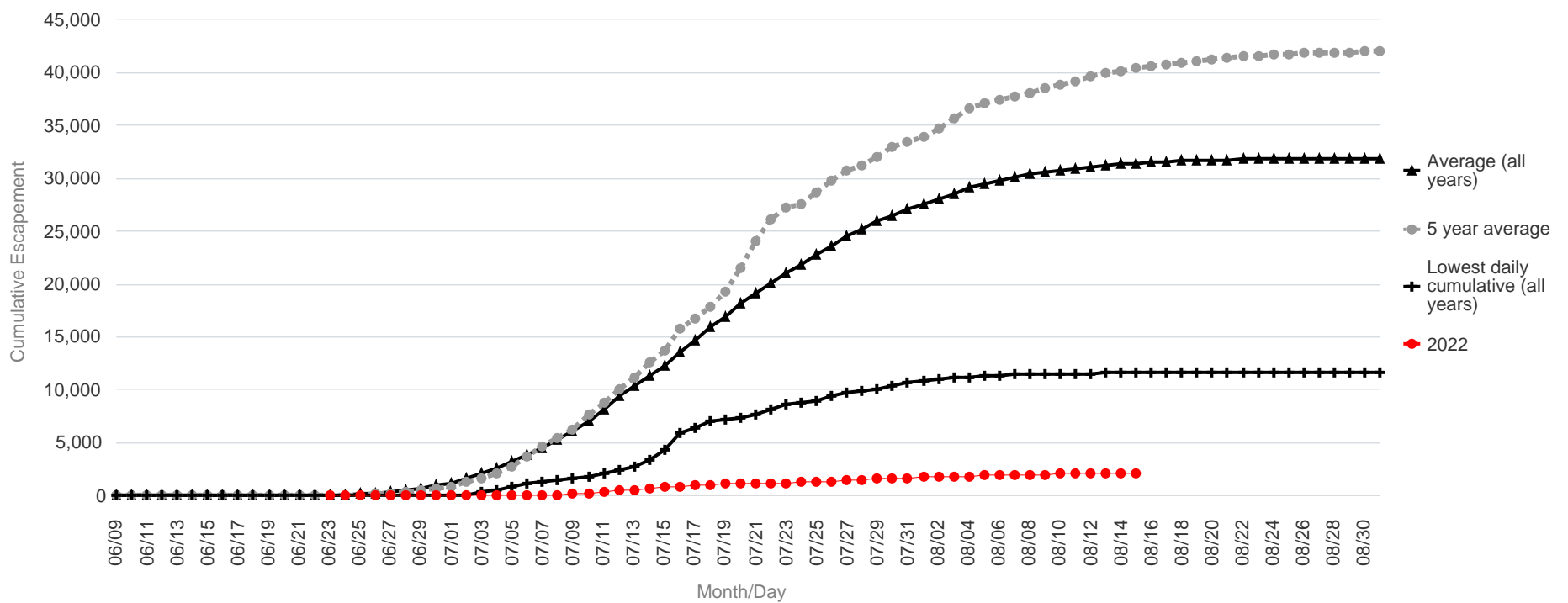
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	11,453	30,617	38,474	2,016
08/10	11,511	30,805	38,822	2,021
08/11	11,544	30,959	39,223	2,026
08/12	11,558	31,096	39,594	2,028
08/13	11,579	31,237	39,902	2,042
08/14	11,595	31,354	40,187	2,062
08/15	11,604	31,440	40,417	2,080
08/16	11,610	31,507	40,621	
08/17	11,620	31,574	40,823	
08/18	11,635	31,628	40,968	
08/19	11,644	31,671	41,077	
08/20	11,648	31,715	41,214	
08/21	11,650	31,753	41,341	
08/22	11,654	31,793	41,513	
08/23	11,658	31,819	41,611	

	Lowest Count	Average Count	5 Year Average
Season Total	11,691	31,977	42,166

Focused Two-Week Data View



Season Total Overview

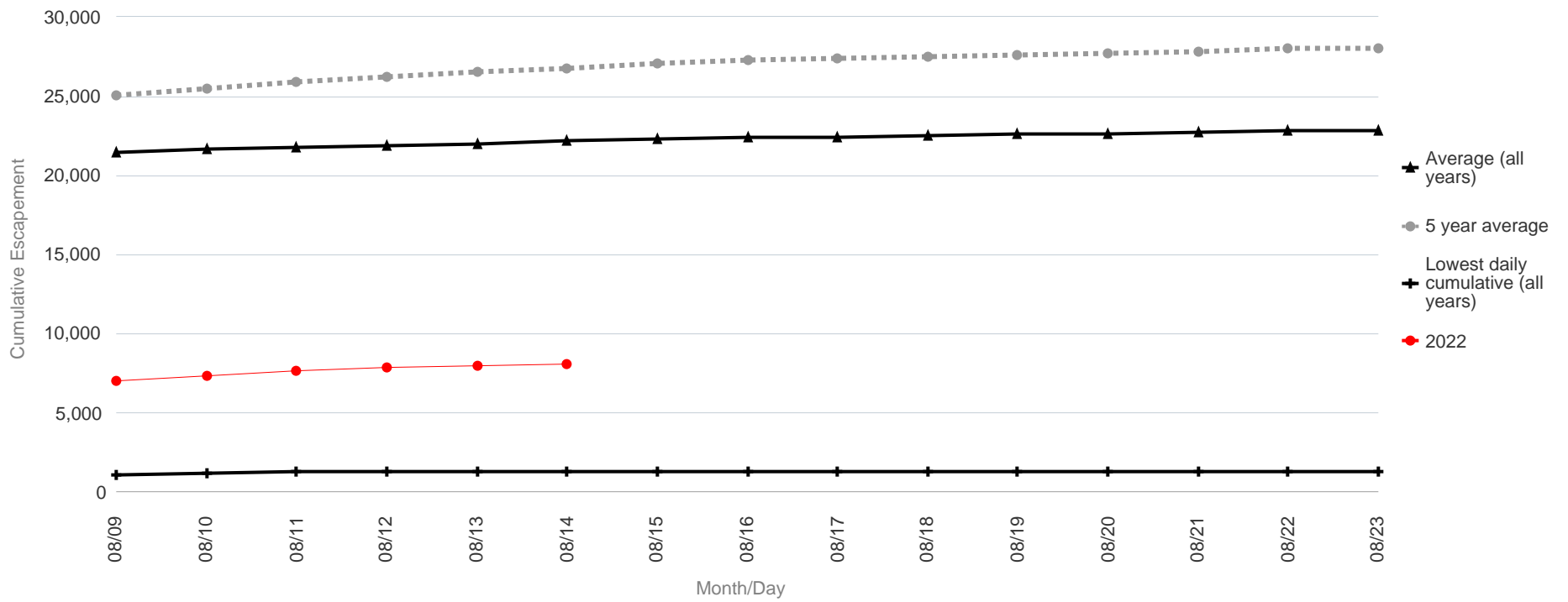


George River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

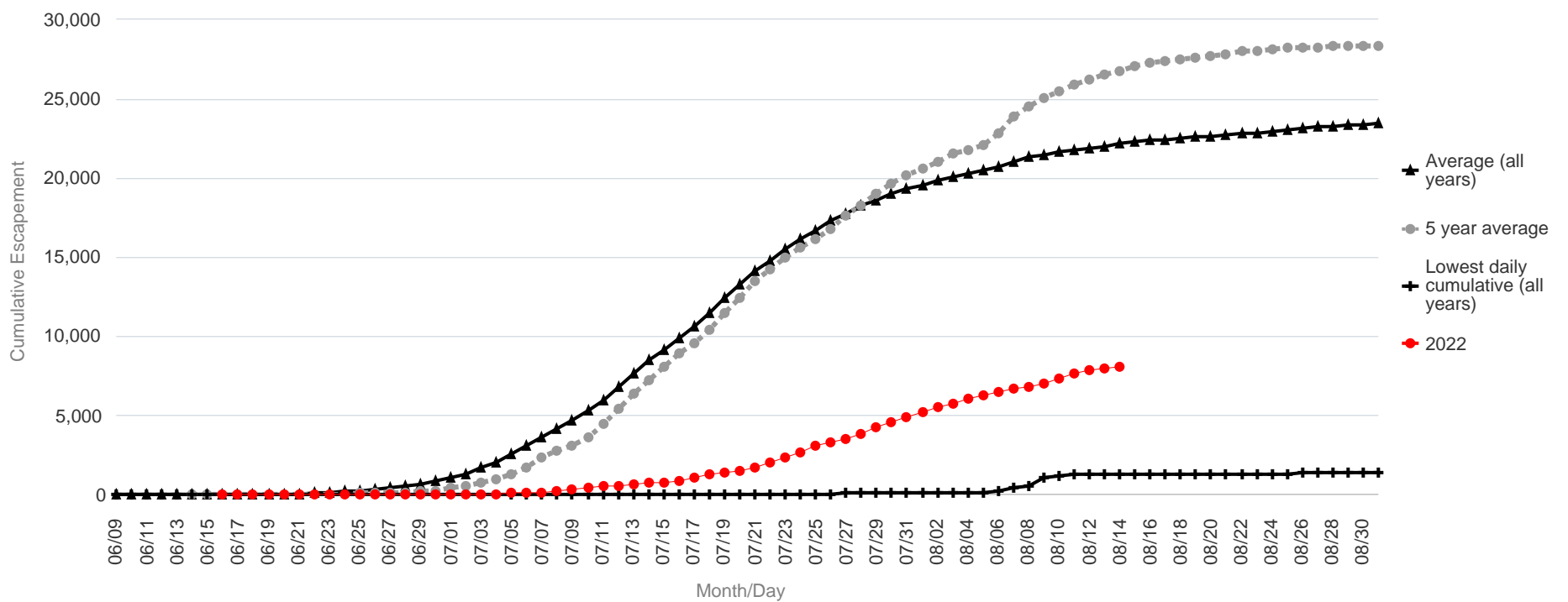
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,033	21,480	25,081	6,996
08/10	1,232	21,643	25,484	7,335
08/11	1,256	21,786	25,881	7,674
08/12	1,274	21,918	26,213	7,872
08/13	1,279	22,035	26,555	7,983
08/14	1,294	22,192	26,783	8,058
08/15	1,298	22,291	27,041	
08/16	1,306	22,376	27,258	
08/17	1,310	22,450	27,389	
08/18	1,319	22,521	27,489	
08/19	1,321	22,569	27,600	
08/20	1,322	22,617	27,681	
08/21	1,328	22,732	27,782	
08/22	1,332	22,820	27,984	
08/23	1,340	22,872	28,056	

	Lowest Count	Average Count	5 Year Average
Season Total	1,371	24,007	28,454

Focused Two-Week Data View



Season Total Overview



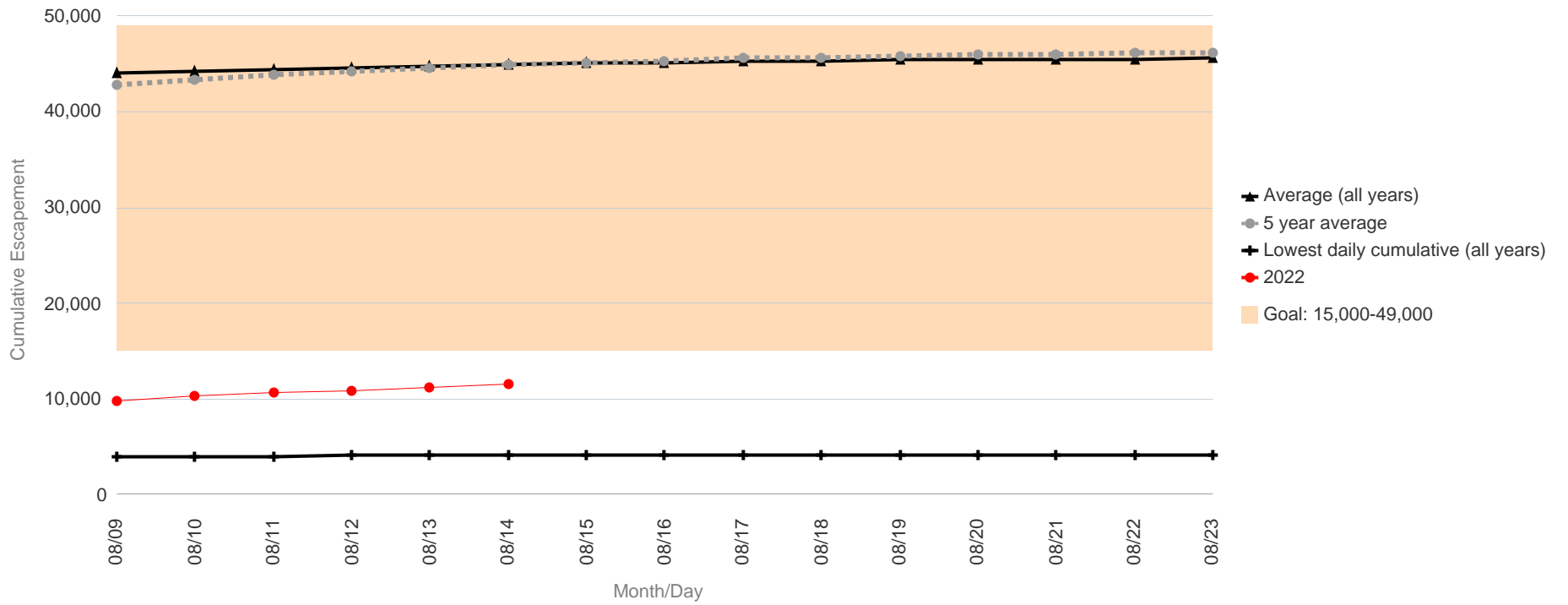
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Chum Salmon

Escapement Goal Range: 15,000 to 49,000

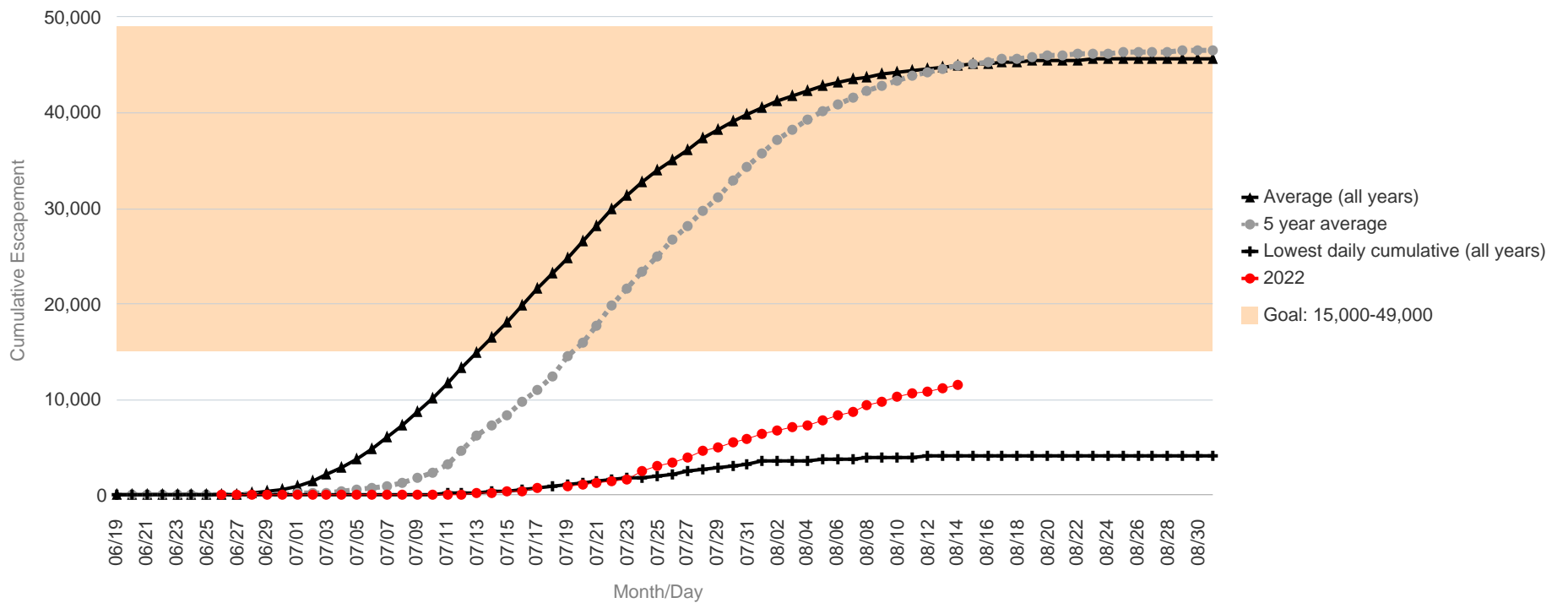
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	3,914	44,044	42,835	9,833
08/10	3,969	44,277	43,369	10,246
08/11	4,009	44,483	43,847	10,697
08/12	4,026	44,671	44,261	10,894
08/13	4,072	44,828	44,625	11,257
08/14	4,085	44,962	44,895	11,458
08/15	4,094	45,088	45,160	
08/16	4,106	45,190	45,371	
08/17	4,113	45,283	45,576	
08/18	4,117	45,357	45,728	
08/19	4,119	45,419	45,856	
08/20	4,124	45,475	45,985	
08/21	4,128	45,523	46,062	
08/22	4,128	45,564	46,121	
08/23	4,135	45,598	46,169	

	Lowest Count	Average Count	5 Year Average
Season Total	4,153	45,763	46,599

Focused Two-Week Data View



Season Total Overview

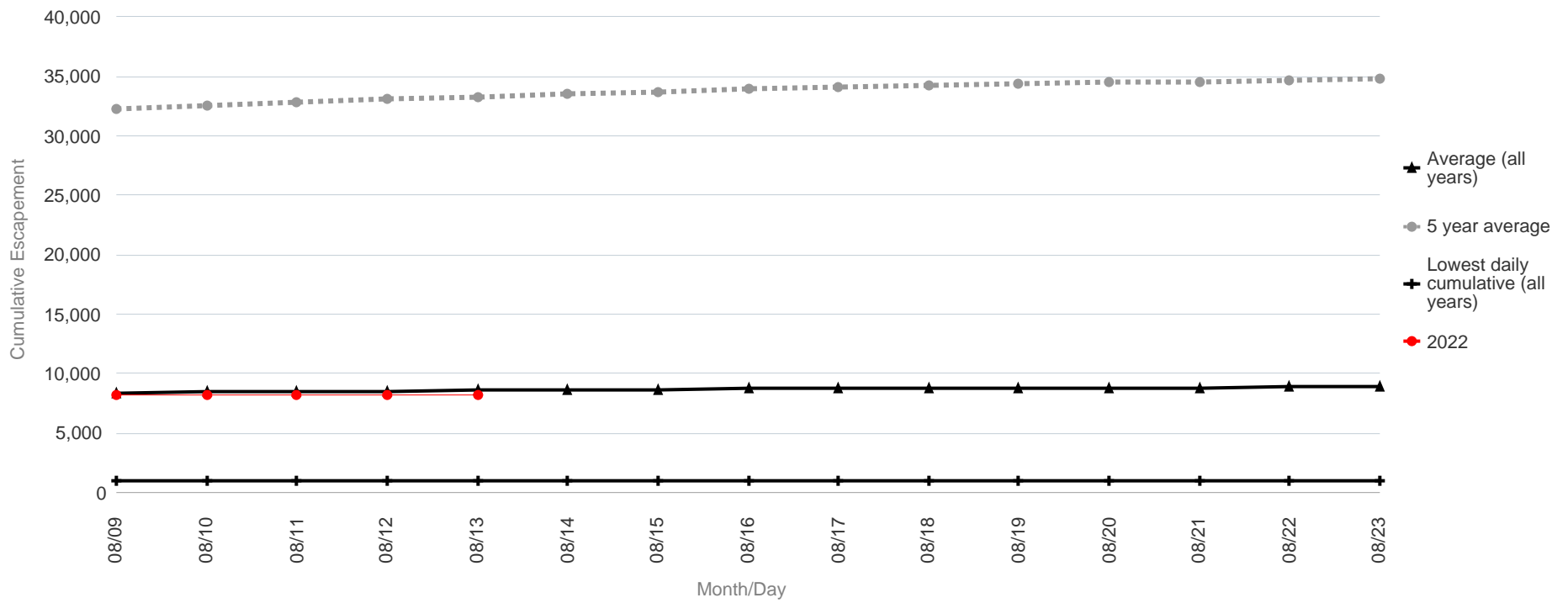


Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

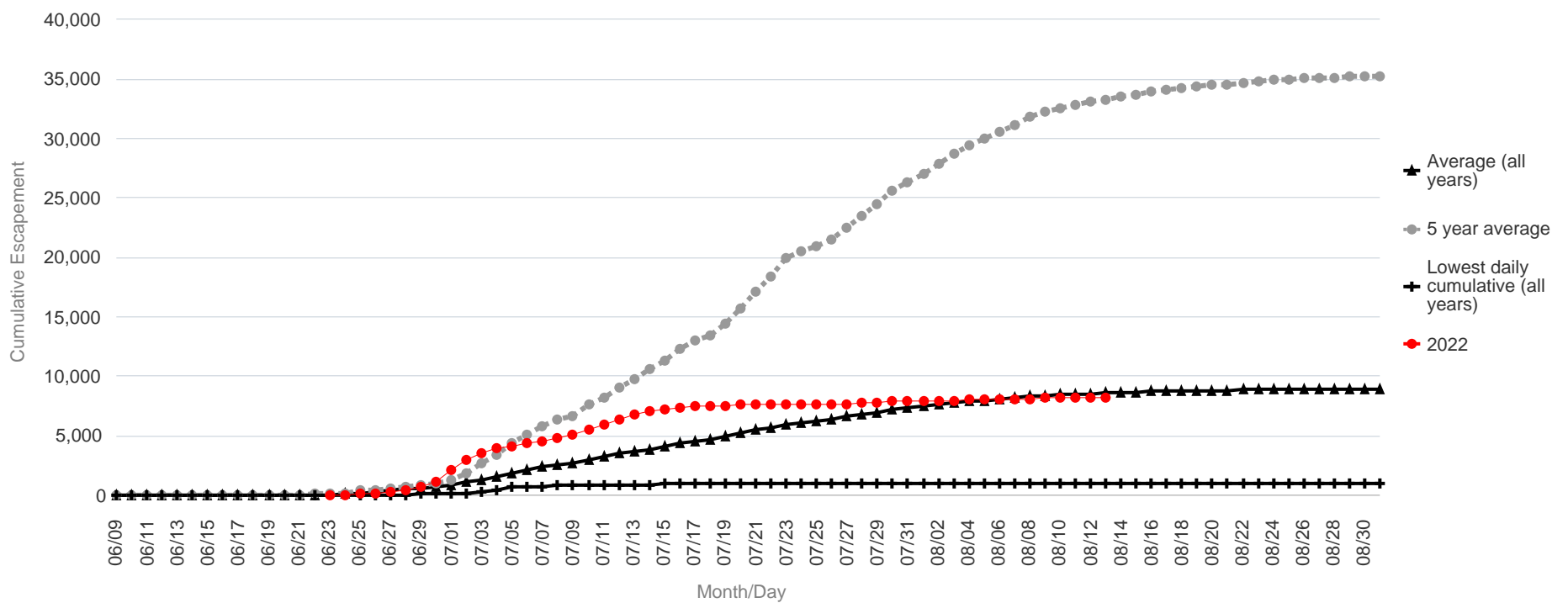
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,028	8,417	32,254	8,164
08/10	1,029	8,479	32,587	8,170
08/11	1,032	8,533	32,883	8,174
08/12	1,032	8,576	33,107	8,181
08/13	1,032	8,618	33,328	8,192
08/14	1,032	8,652	33,507	
08/15	1,033	8,688	33,697	
08/16	1,034	8,730	33,932	
08/17	1,034	8,773	34,169	
08/18	1,035	8,797	34,294	
08/19	1,035	8,818	34,406	
08/20	1,035	8,841	34,524	
08/21	1,036	8,860	34,615	
08/22	1,036	8,881	34,730	
08/23	1,037	8,900	34,830	

	Lowest Count	Average Count	5 Year Average
Season Total	1,049	9,040	35,509

Focused Two-Week Data View



Season Total Overview



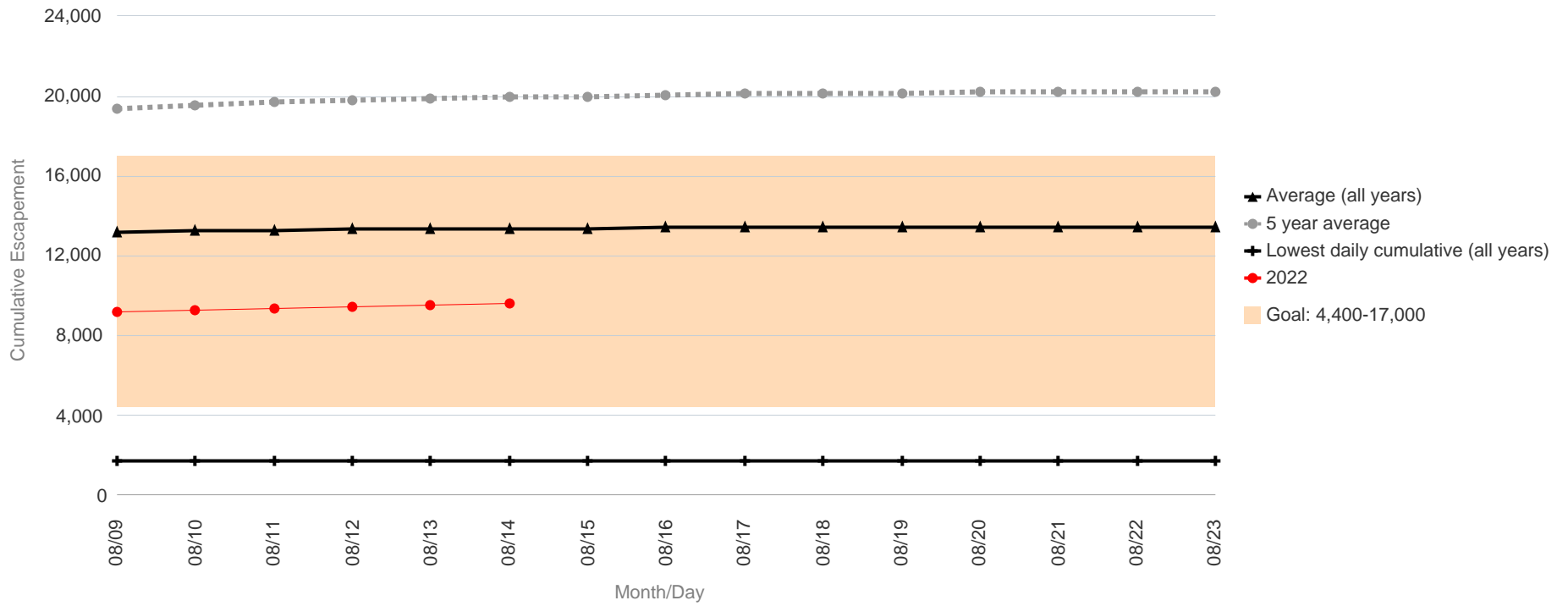
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Sockeye Salmon

Escapement Goal Range: 4,400 to 17,000

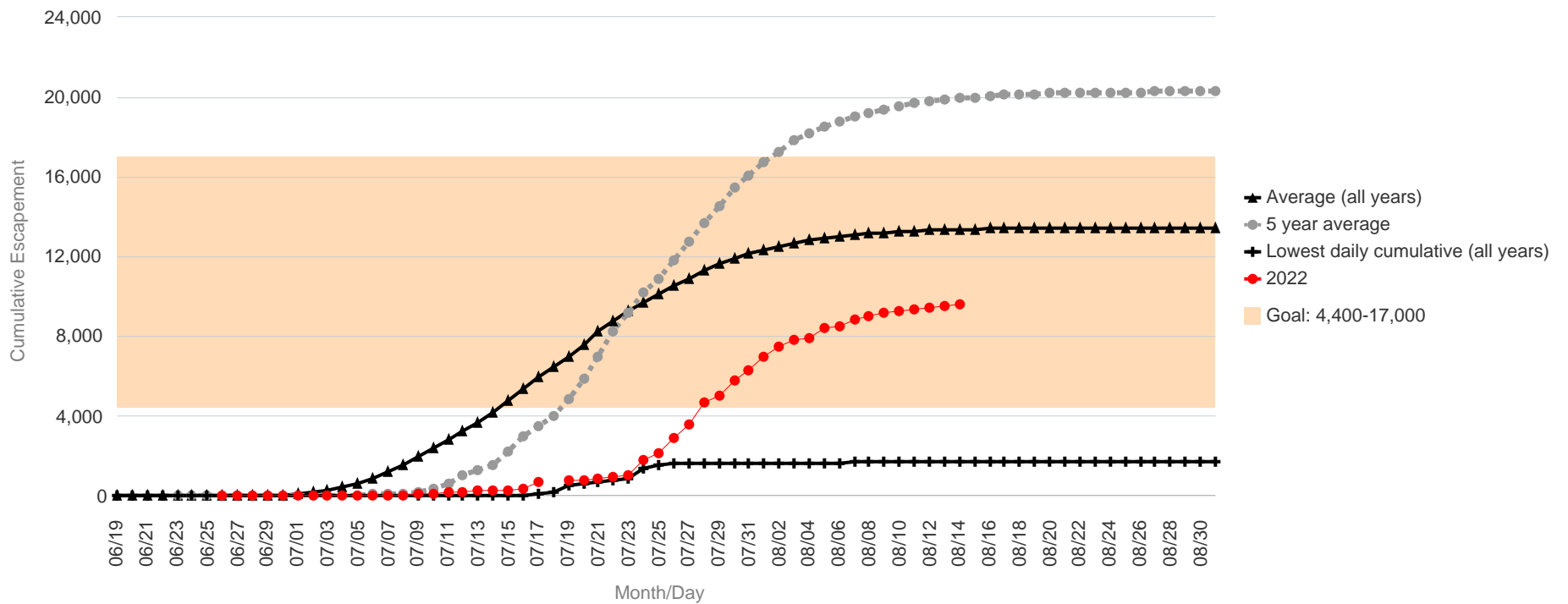
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	1,675	13,201	19,410	9,145
08/10	1,675	13,242	19,549	9,230
08/11	1,676	13,282	19,675	9,358
08/12	1,676	13,313	19,775	9,435
08/13	1,676	13,338	19,867	9,496
08/14	1,676	13,359	19,940	9,566
08/15	1,676	13,379	20,002	
08/16	1,676	13,393	20,058	
08/17	1,676	13,406	20,102	
08/18	1,676	13,415	20,131	
08/19	1,676	13,423	20,152	
08/20	1,676	13,431	20,176	
08/21	1,676	13,437	20,198	
08/22	1,676	13,441	20,212	
08/23	1,676	13,445	20,229	

	Lowest Count	Average Count	5 Year Average
Season Total	1,676	13,471	20,323

Focused Two-Week Data View



Season Total Overview

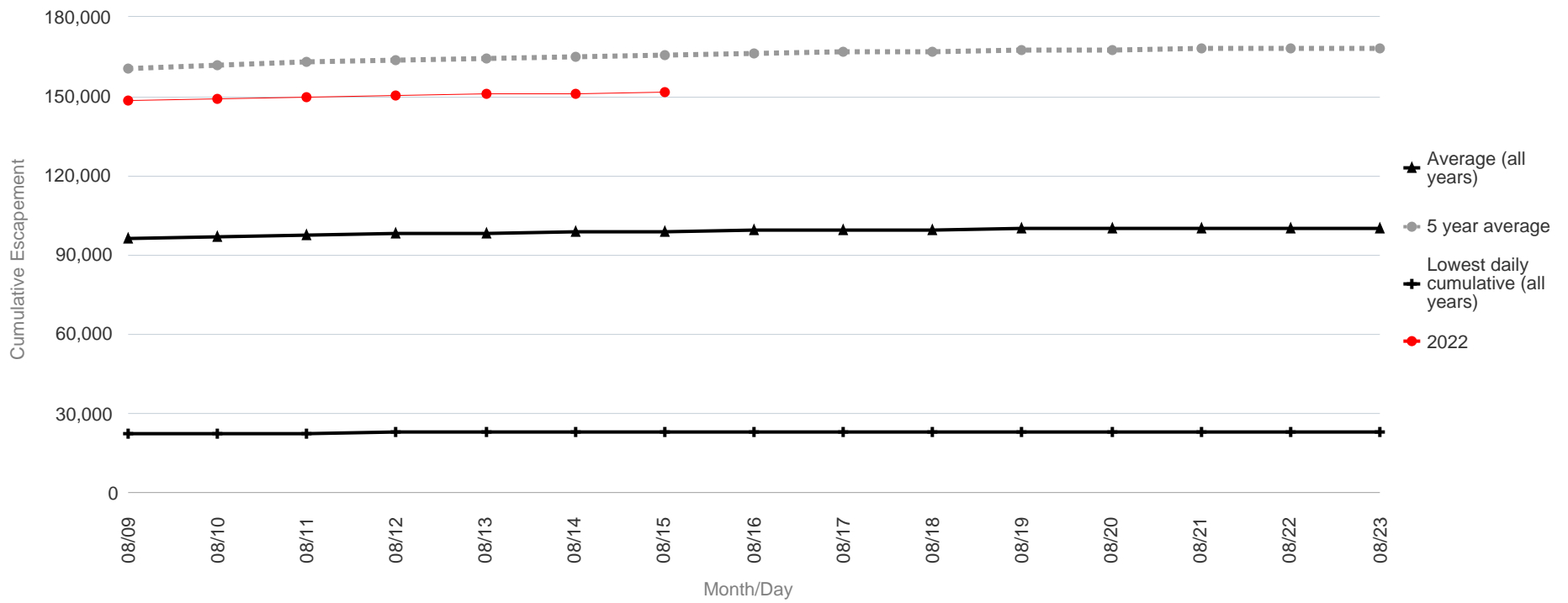


Telaquana River Salmon Monitoring Project Passage of Sockeye Salmon

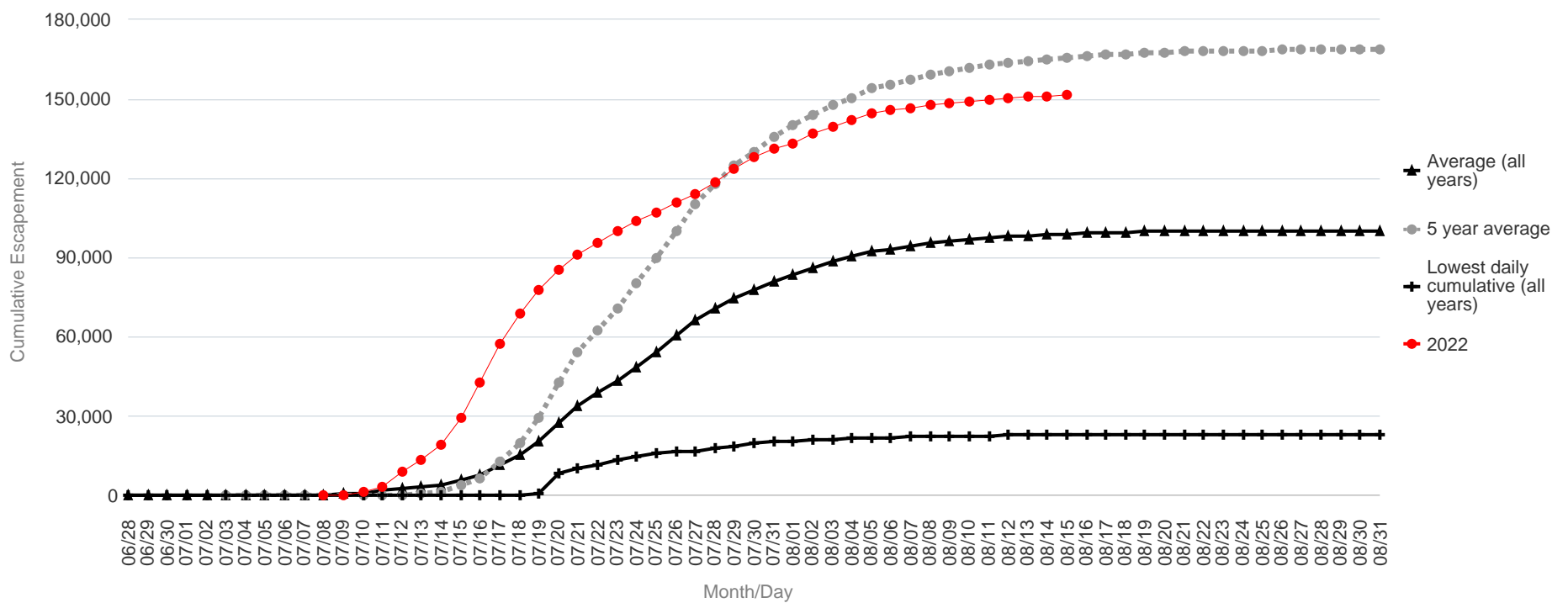
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	22,483	96,085	160,597	148,374
08/10	22,607	96,779	161,858	149,248
08/11	22,664	97,367	162,926	149,892
08/12	22,742	97,864	163,843	150,331
08/13	22,797	98,248	164,502	150,679
08/14	22,871	98,560	165,045	151,045
08/15	22,880	98,905	165,720	151,436
08/16	22,911	99,223	166,362	
08/17	22,919	99,453	166,835	
08/18	22,936	99,619	167,173	
08/19	22,944	99,767	167,477	
08/20	22,956	99,926	167,813	
08/21	22,963	100,012	167,989	
08/22	22,976	100,095	168,156	
08/23	22,987	100,162	168,296	

	Lowest Count	Average Count	5 Year Average
Season Total	23,007	100,280	168,520

Focused Two-Week Data View



Season Total Overview



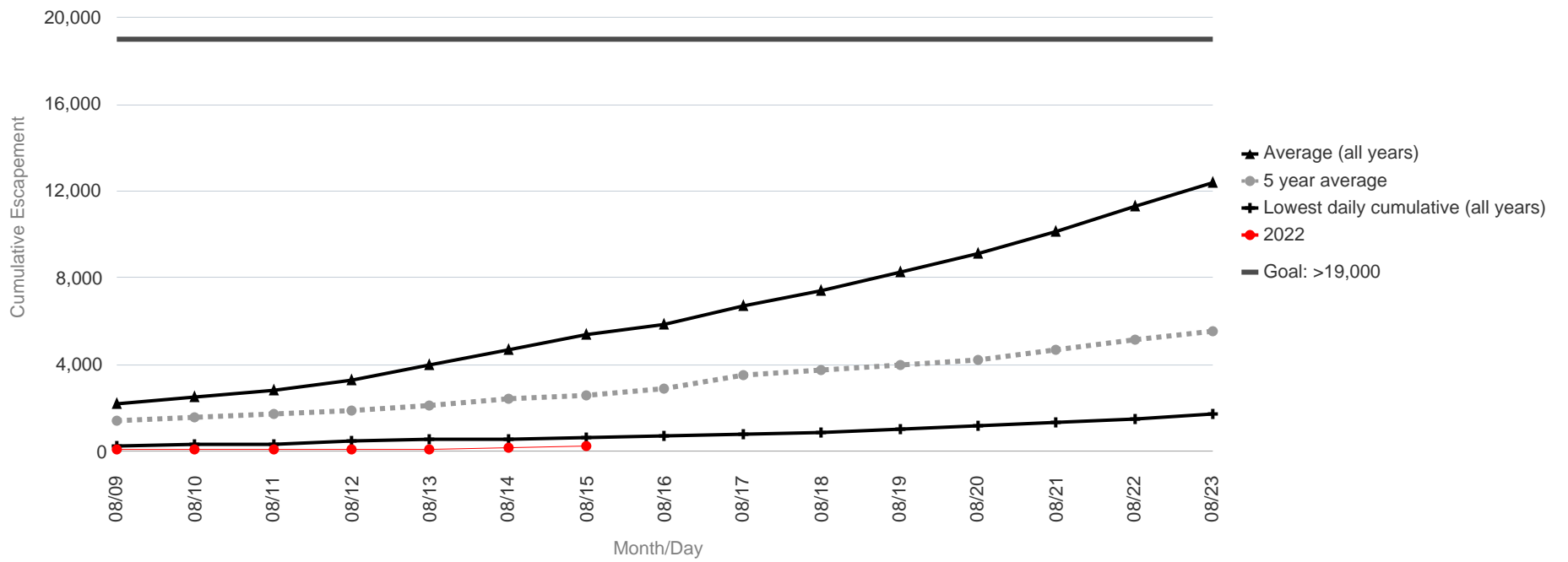
Kwethluk River Salmon Monitoring Project Cumulative Daily Passage of Coho Salmon

Escapement Goal: >19,000

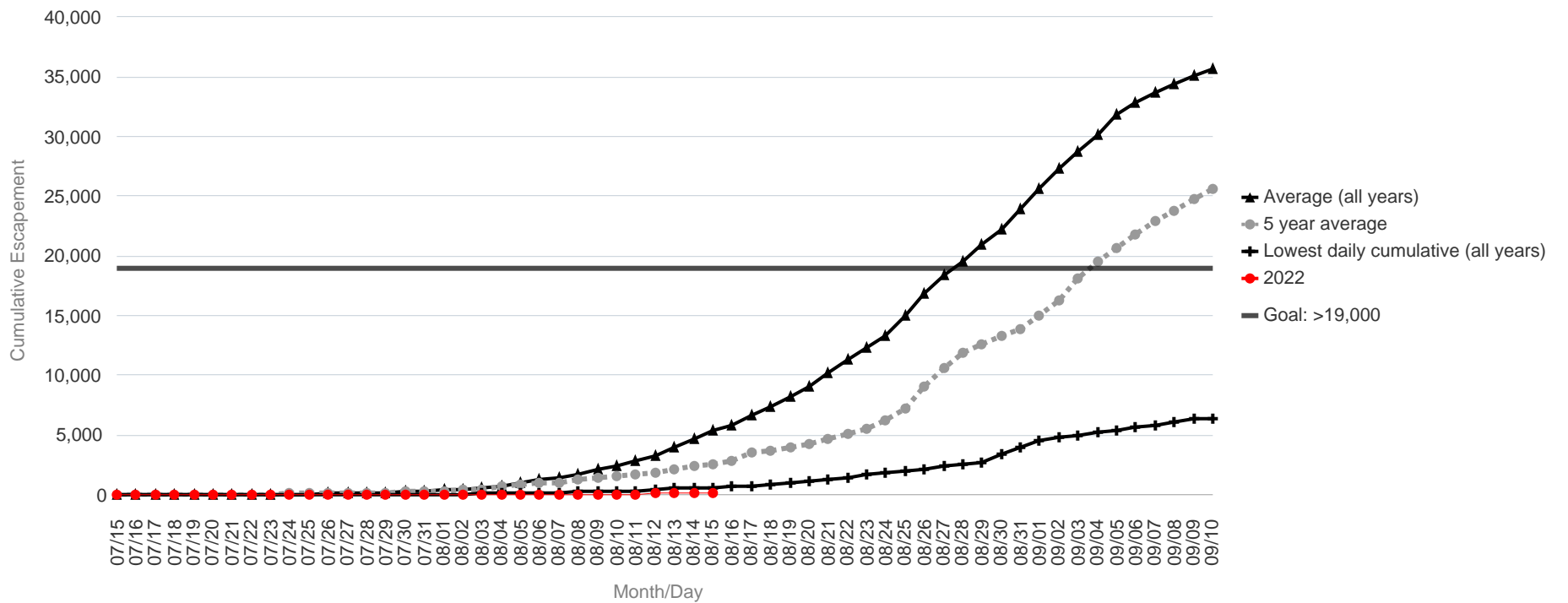
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	271	2,179	1,377	91
08/10	307	2,485	1,574	94
08/11	331	2,846	1,740	97
08/12	459	3,295	1,895	104
08/13	554	3,997	2,116	122
08/14	598	4,664	2,400	156
08/15	651	5,369	2,600	219
08/16	715	5,842	2,926	
08/17	799	6,728	3,530	
08/18	899	7,372	3,774	
08/19	1,021	8,283	3,955	
08/20	1,156	9,143	4,231	
08/21	1,316	10,156	4,694	
08/22	1,497	11,315	5,180	
08/23	1,697	12,349	5,512	

	Lowest Count	Average Count	5 Year Average
Season Total	7,465	41,101	32,583

Focused Two-Week Data View



Season Total Overview

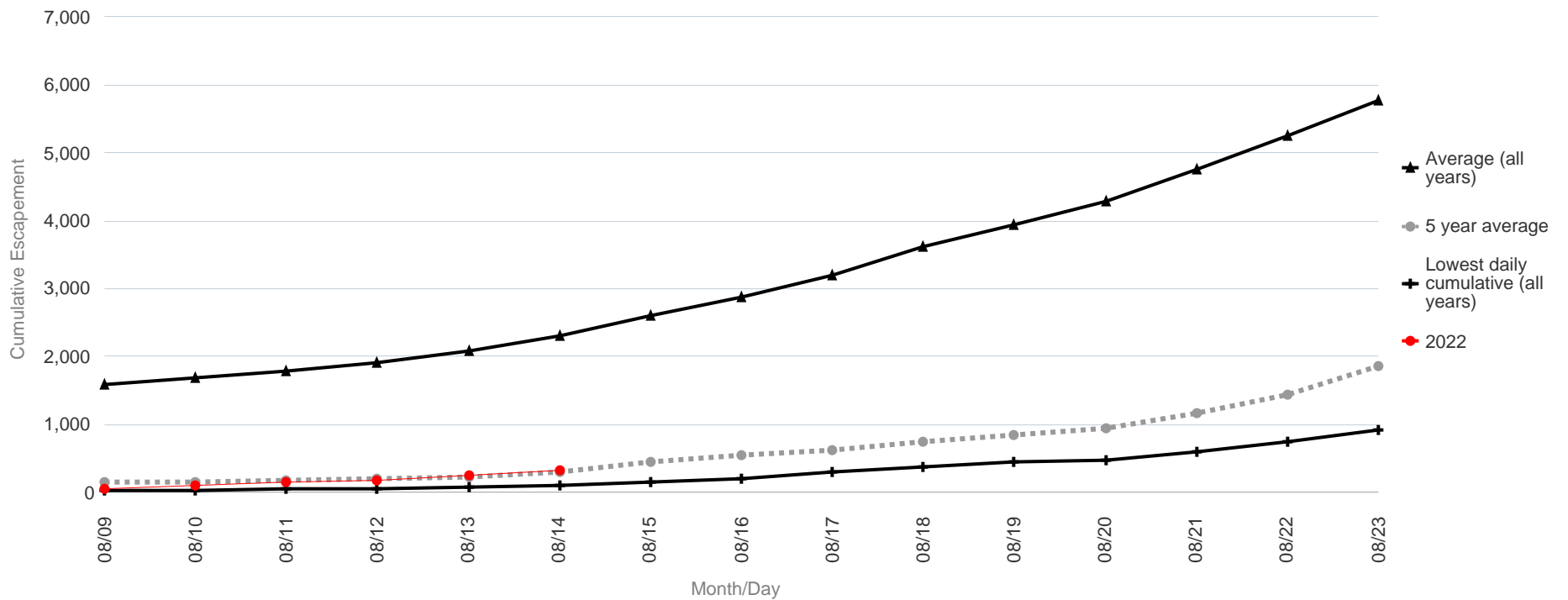


George River Salmon Monitoring Project Cumulative Daily Passage of Coho Salmon

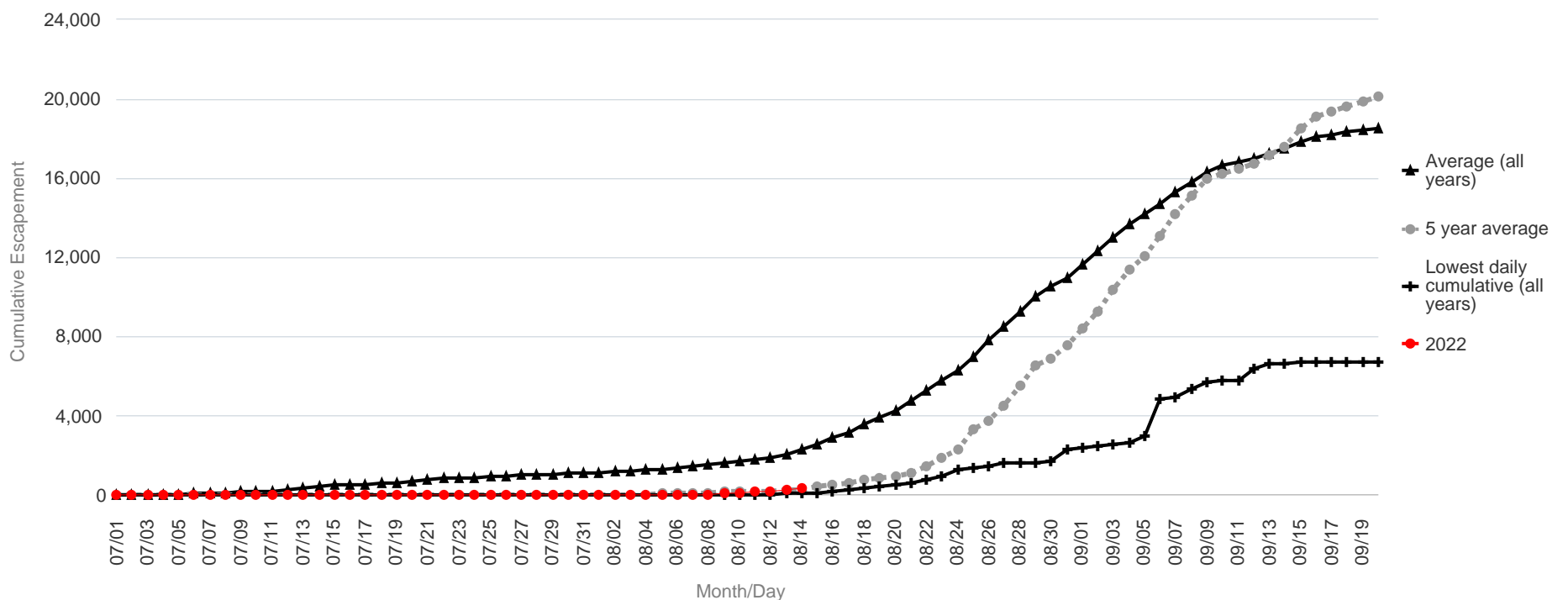
Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	28	1,587	146	65
08/10	36	1,695	160	101
08/11	47	1,777	177	151
08/12	53	1,899	204	178
08/13	76	2,077	236	242
08/14	108	2,309	300	337
08/15	141	2,593	449	
08/16	211	2,868	556	
08/17	305	3,190	620	
08/18	388	3,608	744	
08/19	439	3,930	854	
08/20	483	4,287	949	
08/21	589	4,755	1,156	
08/22	740	5,255	1,449	
08/23	910	5,770	1,852	

	Lowest Count	Average Count	5 Year Average
Season Total	6,759	18,542	20,105

Focused Two-Week Data View



Season Total Overview



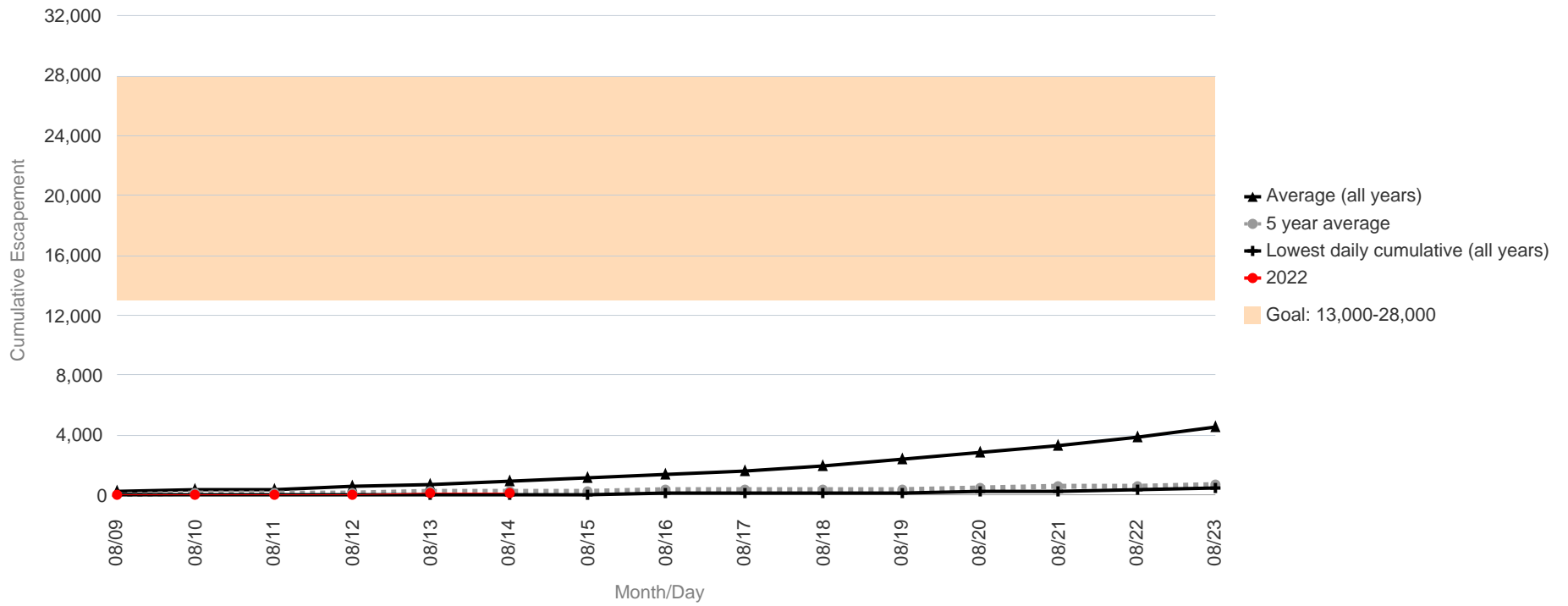
Kogrukluk River Salmon Monitoring Project Cumulative Daily Passage of Coho Salmon

Escapement Goal Range: 13,000 to 28,000

Date	Lowest daily cumulative (all years)	Average (all years)	5 year average	2022
08/09	5	244	77	9
08/10	5	325	103	13
08/11	8	398	133	32
08/12	13	540	151	58
08/13	21	687	202	93
08/14	35	885	232	119
08/15	53	1,127	268	
08/16	84	1,384	306	
08/17	128	1,648	357	
08/18	181	1,998	387	
08/19	191	2,366	398	
08/20	247	2,801	479	
08/21	250	3,336	560	
08/22	317	3,873	630	
08/23	469	4,514	757	

	Lowest Count	Average Count	5 Year Average
Season Total	3,480	23,216	13,004

Focused Two-Week Data View



Season Total Overview

