## NATIONAL PARK SERVICE

Wrangell-St. Elias National Park & Preserve Mile 106.8 Richardson Hwy. P.O. Box 439 Copper Center, AK 99573-0439 907 822 5234

# Fall 2024 Fisheries Report Dave Sarafin, Fisheries Biologist

## **SUMMARY OF KEY UPDATES**

- Through August 18, the Tanada Creek weir at Batzulnetas has documented passage of 12,009 Sockeye Salmon and 9 Chinook Salmon (preliminary count estimates). The return appears to be on track to end near the historical season total count average of approximately 18,000.
- Similar to recent years, the Copper River salmon run began weak, then increased in strength as the season progressed. Harvest opportunities continued throughout the 2024 season and the Sockeye Salmon sustainable escapement goal should be achieved.
- Miles Lake sonar estimated a season total passage of 946,188 salmon, which is 58% above the management objective of 599,157 salmon (through July 28).
- Assessments by the Alaska Department of Fish and Game (ADFG) of in-river Chinook Salmon indicate an abundance that may not meet the minimum bound of the sustainable escapement goal range of 21,000 to 31,000 fish. ADFG management actions closed all State Chinook Salmon fisheries of the Upper Copper River by mid-season.
- Upper Copper River Federal subsistence fishery permits; issued were (preliminary numbers): 203 Chitina Subdistrict, 294 Glennallen Subdistict, and 2 Batzulnetas permits.
- Historical Federal subsistence harvests in the Upper Copper River through 2023 are provided in Tables 1-4.
- Federal subsistence fishery in the Lower Copper River; 80 permits were issued, and total inseason reported harvest was 425 Sockeye Salmon and 2 Chinook Salmon.



Tanada Creek Salmon Weir, 2024

#### FISHERIES RESEARCH AND MONITORING PROJECTS

## Tanada Creek Salmon Weir

The Wrangell-St. Elias National Park and Preserve (WRST) Fisheries Program operated the Tanada Creek salmon weir located at Batzulnetas (funded through the Fisheries Resource Monitoring Program (FRMP)). Weir installation was completed on June 25. The first salmon was documented passing the weir on June 26. As of August 18, there have been 12,009 Sockeye Salmon and 9 Chinook Salmon recorded in passage for the season. If the Sockeye Salmon overall run timing is similar to recent years, then the season count may end up above the historical average of approximately 18,000 fish. The weir is scheduled to continue operating through September 25.

#### **UPPER COPPER RIVER FISHERIES**

## 2024 Copper River Salmon Run Strength and Management Actions

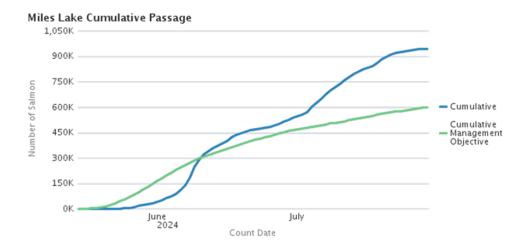
The 2024 Copper River salmon run began in low numbers relative to the date in season. The return then increased in strength as the season progressed. A similar pattern of delayed run timing for these stocks has been observed in recent years. Federal managers monitored run strength indices throughout the season to evaluate the need for appropriate fisheries management actions. No Federal Special Actions were issued by the in-season manager in the fisheries of the Copper River Drainage. Harvest opportunities continued throughout the season.

Commercial fishing opportunities in the Copper River District were limited during the early season in response to low numbers of returning salmon at the start of the season. As the run developed, fishing opportunities were expanded during the season. The season total commercial harvest for the Copper River District through August 13 is reported to include 1,400,000 Sockeye Salmon and 8,871 Chinook Salmon

The ADFG sonar at Miles Lake (located just downstream of the Million Dollar Bridge in the Copper River) discontinued operation on July 28. A total of 946,188 salmon were estimated in migration upstream for the season. The season passage estimate is 58% above the July 28 management objective of 599,157 salmon.



2024 Copper River Salmon Passage at Miles Lake Sonar



\*Management objectives are based on historical run-timing to achieve the in-river goal.

Source: http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareacopperriver.salmon escapement

In contrast to the high sonar estimates, assessments by ADFG biologists of the numbers of Chinook Salmon in-river indicate a weak return that likely did not meet the sustainable escapement goal for the season. In response to the in-season assessment, the ADFG closed all State fisheries of the Upper Copper River drainage to Chinook Salmon harvest, including catch and release in sport fisheries and the State subsistence fishery of the Glennallen Subdistrict. All State users were required to closely attend fish wheels being operated so Chinook Salmon could be immediately released.

These restrictions did affect those fishing under Federal subsistence regulations. After careful consideration and consultation no Federal Special Action was issued by the in-season manager to restrict harvest Chinook Salmon harvest in fisheries of the Copper River Drainage.

Although Federal actions were not taken, WRST prepared and distributed advisory announcements to inform all subsistence users of the concerns for Copper River Chinook Salmon. The announcement strongly recommended that users release healthy Chinook Salmon from all gear types.

## 2024 Upper Copper River Federal Subsistence Fishing Season, Permits, and Historical Harvests

The Federal subsistence salmon fisheries of the Upper Copper River are open from May 15 through September 30. Through August 15, WRST has issued 203 Chitina Subdistrict permits, 294 Glennallen Subdistrict permits, and 2 Batzulnetas permits (numbers of permits issued are preliminary until records from remote issuing stations are received). Tables 1 through 4 show historical reported and expanded harvests for the Federal subsistence fisheries in each subdistrict through the 2023 season.

## 2024 Lower Copper River Federal Subsistence Fishery

The Federal subsistence salmon fishery in the Lower Copper River near Cordova is open from June 1 through September 30. To date, there have been 80 permits issued through the OSM database. A total of 425 Sockeye Salmon and 2 Chinook Salmon were reported in harvest through July 29.

Table 1. Federal Subsistence Fish Harvest in All Upper Copper River Fisheries, including Harvest by Gear Type<sup>1</sup>

-				rvest Estimat		All Species, Approximate Harvest by Gear Type						
Year	Sockeye	Chinook	Coho	Steelhead/ Rainbow Trout	Other Species	Total Harvest	Fish Wheel %	Fish Wheel Total	Dip Net %	Dip Net Total	Rod and Reel %	Rod and Reel Total
2002	10,933	745	20	77	N.A.	11,775	WHEET 70	Total	Dip Net 70	Total	Reel /0	Keel I otal
2002	17,393	687	259	16	N.A.	18,355						
2003	24,217	815	216	15	N.A.	25,264						
2004	24,781	412	55	7	37	25,204						
2005	20,737	507	55 55	17	37	21,353						
2007	19,108	704	85	7	25	19,929						
2007	14,865	892	268	21	54	16,100						
2008	14,803	590	52	22	36	15,521						
2009	17,156	362	111	46	25	17,700	90.3%	15,978	9.6%	1,697	0.1%	25
2010	18,214	814	70		283	19,387	90.3% 88.4%	17,142	9.0% 11.4%	2,206	0.1%	39
				6				*		-		
2012	17,297	410	93	45	113	17,958	90.4%	16,228	9.4%	1,684	0.3%	45
2013	20,850	396	36	8	93	21,382	85.9%	18,369	14.1%	3,013	0.0%	0
2014	25,659	456	97	14	57	26,284	89.3%	23,458	10.8%	2,825	0.0%	3
2015	29,157	430	29	15	218	29,849	90.1%	26,900	9.7%	2,883	0.2%	66
2016	21,106	465	52	6	406	22,035	90.0%	19,820	10.0%	2,197	0.1%	18
2017	20,497	485	10	8	549	21,550	96.2%	20,724	3.7%	804	0.1%	19
2018	20,634	2,763	31	4	45	23,476	83.4%	19,579	16.5%	3,878	0.1%	19
2019	22,302	1,025	22	3	59	23,411	79.0%	18,485	21.0%	4,909	0.1%	16
2020	16,337	837	26	7	60	17,266	75.9%	13,098	24.1%	4,159	0.1%	9
2021	20,481	610	3	6	32	21,132	70.8%	14,951	29.2%	6,175	0.0%	6
2022	17,489	994	45	16	60	18,603	80.2%	14,919	19.8%	3,676	0.0%	7
2023 2024	20,984	805	15	11	18	21,833	70.6%	15,414	29.4%	6,419	0.0%	1
5-yr. Avg.												
2019-2023	19,519	854	22	8	46	20,449	75.3%	15,374	24.7%	5,068	0.0%	8
10-yr. Avg. 2014-2023	21,465	887	33	9	150	22,544	82.5%	18,735	17.4%	3,793	0.1%	16

This table reflects entries to the online database from 2011 through 8/19/2024. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting rom entry error corrections.

Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 2. Glennallen Subdistrict Federal Reported and Expanded Subsistence Fishery Harvests<sup>1</sup>

		Sockeye			Chi	Chinook Coho			Steelhead/Rainbow Trout		Other Species		All Species
Year	Permits Issued	Percentage of Permits Reported	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	Total Harvest Estimate <sup>2</sup>
2002	201	80.6	8,009	9,937	564	700	16	20	62	77	35	43	10,777
2003	221	83.3	13,623	16,354	554	665	145	174	13	16	20	24	17,233
2004	261	78.9	17,704	22,439	636	806	152	193	12	15	12	15	23,468
2005	267	85.8	19,973	23,279	331	386	47	55	6	7	32	37	23,763
2006	254	87.4	16,711	19,120	430	492	28	32	15	17	32	37	19,698
2007	281	84.3	15,225	18,060	569	675	34	40	6	7	21	25	18,808
2008	269	81.4	11,347	13,940	705	866	148	182	17	21	44	54	15,063
2009	274	85.0	11,836	13,925	494	581	34	40	19	22	31	36	14,605
2010	269	87.7	12,849	14,651	300	342	64	73	39	44	22	25	15,136
2011	277	87.7	14,163	16,145	701	799	53	60	5	6	248	283	17,293
2012	275	92.0	14,461	15,718	371	403	78	85	40	43	104	113	16,363
2013	273	89.0	15,834	17,789	331	372	24	27	6	7	62	70	18,264
2014	315	90.5	21,603	23,877	399	441	23	25	10	11	52	57	24,412
2015	325	92.3	24,695	26,753	384	416	13	14	7	8	201	218	27,408
2016	320	82.8	15,884	19,181	369	446	9	11	5	6	332	401	20,044
2017	338	85.2	15,691	18,415	399	468	1	1	7	8	468	549	19,442
2018	335	91.3	15,287	16,736	2,432	2,662	0	0	4	4	41	45	19,448
2019	343	90.1	15,873	17,620	849	942	0	0	3	3	53	59	18,624
2020	376	90.7	11,456	12,632	682	752	0	0	6	7	54	60	13,450
2021	355	86.5	13,117	15,168	434	502	0	0	5	6	28	32	15,708
2022	297	83.5	12,133	14,530	743	890	2	2	13	16	48	57	15,495
2023	290	83.8	12,557	14,986	551	658	8	10	9	11	15	18	15,681
2024	294												
5-yr. Avg. 2019-2023	332	87	13,027	14,987	652	749	2	2	7	8	40	45	15,792
10-yr. Avg. 2014-2023	329	88	15,830	17,990	724	818	6	6	7	8	129	150	18,971

<sup>&</sup>lt;sup>1</sup> This table reflects entries to the online database from 2011 through **8/19/2024**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

<sup>&</sup>lt;sup>2</sup> Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 3. Chitina Subdistrict Federal Reported and Expanded Subsistence Fishery Harvests<sup>1</sup>

			Soc	keye	Chinook Coho			Steelhead/Ra	ainbow Trout	Other Species		All Species	
Year	Permits Issued	Percentage of Permits Reported	Reported Harvest	Harvest Estimate <sup>2</sup>	Total Harvest Estimate <sup>2</sup>								
2002	122	73.0	575	788	33	45	0	0	0	0	N.A.	N.A.	833
2003	100	82.0	717	874	18	22	70	85	0	0	N.A.	N.A.	982
2004	109	76.1	1,215	1,597	7	9	18	24	0	0	N.A.	N.A.	1,629
2005	76	84.2	1,265	1,502	22	26	0	0	0	0	0	0	1,529
2006	75	85.3	1,379	1,617	13	15	20	23	0	0	0	0	1,655
2007	98	88.8	929	1,046	26	29	40	45	0	0	0	0	1,120
2008	82	85.4	789	924	22	26	74	87	0	0	0	0	1,036
2009	68	91.2	817	896	8	9	11	12	0	0	0	0	917
2010	92	85.9	2,061	2,399	17	20	33	38	1	1	0	0	2,459
2011	85	85.9	1,766	2,056	13	15	8	9	0	0	0	0	2,081
2012	89	93.3	1,332	1,427	6	6	8	9	1	1	0	0	1,443
2013	99	90.9	1,999	2,199	17	19	8	9	1	1	10	11	2,239
2014	113	94.7	1,549	1,636	14	15	68	72	3	3	0	0	1,726
2015	111	92.8	2,231	2,404	13	14	14	15	7	8	0	0	2,441
2016	128	80.5	1,549	1,925	16	20	33	41	0	0	4	5	1,991
2017	132	79.5	1,454	1,828	12	15	7	9	0	0	0	0	1,852
2018	132	91.7	3,144	3,430	92	100	28	31	0	0	0	0	3,561
2019	181	90.6	4,053	4,473	75	83	20	22	0	0	0	0	4,578
2020	215	89.3	3,249	3,638	76	85	23	26	0	0	0	0	3,749
2021	194	91.8	4,765	5,193	99	108	3	3	0	0	0	0	5,304
2022	177	87.6	2,555	2,918	91	104	37	42	0	0	2	2	3,066
2023	196	88.8	5,138	5,788	131	148	5	6	0	0	0	0	5,941
2024	203												
5-yr. Avg. 2019-2023	193	90	3,952	4,402	94	105	18	20	0	0	0	0	4,528
10-yr. Avg. 2014-2023	158	89	2,969	3,323	62	69	24	27	1	1	1	1	3,421

<sup>&</sup>lt;sup>1</sup> This table reflects entries to the online database from 2011 through **8/19/2024**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

<sup>&</sup>lt;sup>2</sup> Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits that reported.

Table 4. Batzulnetas Federal Reported and Expanded Subsistence Fishery Harvests<sup>1</sup>

			Soc	keye	Chi	nook	Other Species		
Year	Permits Issued	Percentage of Permits Reported	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	Reported Harvest	Harvest Estimate <sup>2</sup>	
2002	1	100.0	208	208	0	0	0	0	
2003	1	100.0	164	164	0	0	0	0	
2004	1	100.0	182	182	0	0	0	0	
2005	1	100.0	0	0	0	0	0	0	
2006	0	N.A.	0	0	0	0	0	0	
2007	1	100.0	1	1	0	0	0	0	
2008	1	100.0	1	1	0	0	0	0	
2009	0	N.A.	0	0	0	0	0	0	
2010	3	100.0	106	106	0	0	0	0	
2011	3	66.7	9	14	0	0	0	0	
2012	3	66.7	101	152	0	0	0	0	
2013	3	100.0	862	862	5	5	12	12	
2014	2	100.0	146	146	0	0	0	0	
2015	4	100.0	0	0	0	0	0	0	
2016	0	N.A.	0	0	0	0	0	0	
2017	1	100.0	254	254	2	2	0	0	
2018	1	100.0	468	468	0	0	0	0	
2019	1	100.0	209	209	0	0	0	0	
2020	1	100.0	67	67	0	0	0	0	
2021	1	100.0	120	120	0	0	0	0	
2022	2	100.0	41	41	0	0	0	0	
2023	2	100.0	211	211	0	0	0	0	
2024	2								
5-yr. Avg. 2019-2023	1	100	181	181	0	0	0	0	
10-yr. Avg. 2014-2023	2	100	217	217	1	1	1	1	

<sup>&</sup>lt;sup>1</sup> This table reflects entries to the online database from 2011 through **8/19/2024**. Data prior to 2011 relies on NPS records. Data for all years subject to changes resulting from entry error corrections.

<sup>2</sup> Expanded Harvest estimate derived from a basic, direct ratio expansion based on the percentage of permits

that reported.