

File: 71007

DRAFT AGENDA
PACIFIC SALMON COMMISSION
FRASER RIVER PANEL
Friday September 8, 2023 at 11:00 am.
via Zoom Webinar
<https://psc-org.zoom.us/j/88416242194>

- 1) Roll Call (Panel and Tech members, others please email [Angela Xu, frontdesk@psc.org](mailto:Angela.Xu@psc.org))
- 2) Webinar Etiquette:
 - a) Mute Phone: Please mute phone unless you are asking a question
 - b) Chat feature: Please use for questions regarding the distribution only
- 3) Agenda
- 4) Run status of Fraser River sockeye salmon relative to forecasts and adopted run sizes PSC Staff
- 5) In-season data flow for updating objectives PSC staff
 - a) Test fishing catches and acoustics
 - b) Mission projected sockeye vs. Qualark sockeye comparison
 - c) Stock proportions
 - d) Environmental conditions
 - e) Observations from the watershed DFO
- 6) Assessments and recommendations PSC Staff
- 7) Review any decisions on staff recommendations Panel
- 8) Fisheries Recommendations Panel
 - a) Secretariat staff evaluation of fisheries recommendations
 - b) Panel decision on fisheries recommendations
- 9) Other Business Panel
 - a) Relinquishment Dates
 - b) FRP post season meeting (Sept 26-28) – Bellingham, WA
 - i) Agenda
 - ii) Meeting start time?
 - c) Weekly Report
- 10) Next FRP Meeting, Tuesday September 12, 11:00 a.m. via Zoom Webinar Panel
 Next Technical Committee meeting, Thursday September 14, 1:00 p.m. via Zoom TC

2023 Run status of Fraser sockeye and pink salmon

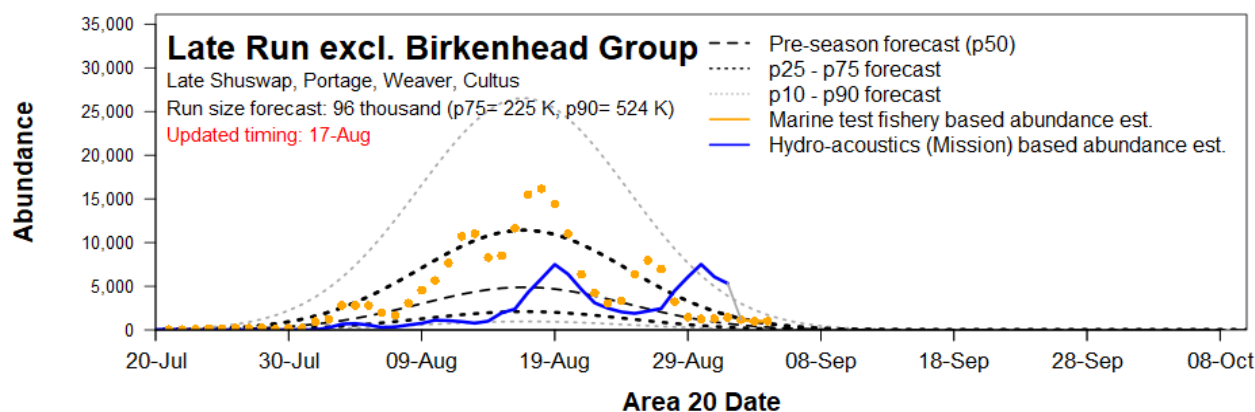
Date: Sep. 8, 2023

The information presented in this distribution has been prepared by PSC Secretariat staff and should be considered preliminary until reviewed by the Fraser River Panel

Week of: Sep. 3 - Sep. 9, 2023	Sockeye				Pink	
	Management Group				Total Fraser	Total Fraser
	E.Stuart	E.Summer	Summer	Late		
Mission passage (inclds Pitt, Alouette, Coquitlam)	40,900	322,700	890,300	287,600	1,541,500	4,588,100
Catch downstream of Mission	200	3,900	11,400	4,600	20,100	501,800
Accounted Run To Date	41,100	326,600	901,700	292,200	1,561,600	5,089,900
Run size adopted in-season ²	41,000	335,000	950,000	280,000	1,606,000	20,000,000
Run size forecasted pre-season	23,000	186,000	1,167,000	188,000	1,564,000	6,135,000
Area 20 timing adopted in-season	2/Jul	26/Jul	13/Aug	17/Aug	8/Aug	20/Aug
Area 20 timing expected pre-season	7/Jul	6/Aug	17/Aug	24/Aug	16/Aug	25/Aug
Johnstone Str. Diversion Rate					Annual average to date	67%
					Preseason forecast of annual rate:	67%
						36%
						62%

¹ For pink salmon the accounted run-to-date is a reconstruction-based estimate.

² Run sizes are usually not adopted until after the peak of the run has passed through marine test fishery areas in Juan de Fuca and Johnstone straits.



2023 Catch-to-date by fishery

Date: Sep. 8, 2023

Week of: Sep. 3 - Sep. 9, 2023		Sockeye		Pink	
		Total	Fraser	Total	Fraser
Canada		16,662	16,662	192,022	143,107
	Commercial	0	0	174,341	138,802
	First Nations	0	0	5,244	3,491
	Food, Social & Ceremonial (FSC)	0	0	5,244	3,491
	Marine	0	0	3,816	2,063
	Fraser R.	0	0	1,428	1,428
	Economic Opportunity (EO) & Demonstration (Demo)	0	0	0	0
	Escapement Surplus to Spawning Requirements (ESSR)	1,322	1,322	0	0
	Recreational	0	0	12,075	452
	Charter (Albion & A12 Chum test fishery)	683	683	362	362
	Other****	14,657	14,657	0	0
United States		3,881	3,877	467,721	348,233
	Commercial	0	0	467,401	348,015
	Treaty Tribes (TRB)	0	0	359,835	264,379
	All Citizen (AC)	0	0	107,566	83,636
	Treaty Tribes Ceremonial & Subsistence (C&S)	3,353	3,353	320	218
	All Citizen Recreational	0	0	0	0
	Other****	528	524		
	Alaska *	na	na	na	na
Panel-approved Test Fisheries		17,038	16,503	21,160	11,759
	Panel Waters	11,514	11,226	9,861	5,934
	Canada	11,514	11,226	6,211	3,820
	U.S.	0	0	3,650	2,114
	Non-Panel Waters**	5,524	5,277	11,299	5,826
Total		37,581	37,042	680,903	503,100
Catch Seaward of Mission ***		20,586	20,047	679,624	501,821
Catch Upstream of Mission		16,995	16,995	1,279	1,279

* Alaska data are processed post-season and so are unavailable in-season.

** Includes Qualark

*** All catches in marine areas and in the Fraser River downstream of Mission.

**** May include unauthorized directed retention or unauthorized bycatch retention in fisheries directed at other species

		Fraser Sockeye					Fraser Pinks	
		Early Stuart	Early Summer	Summer	Lates	Total	Total	
RUN STATUS, ESCAPEMENT NEEDS & AVAILABLE SURPLUS								
Pre-season or Adopted In-season Run Size		41,000	335,000	950,000	280,000	1,606,000	20,000,000	
Adult Spawning Escapement Target (SET)		41,000	167,500	950,000	280,000	1,438,500	6,000,000	
%SET from TAM rules		100%	50%	100%	100%		30%	
Management Adjustment (MA)*		69,700	180,900	218,500	280,000	749,100	0	
Proportional MA (pMA)*		1.70	1.08	0.23	1.00		0.00	
Adjusted Spawning Escapement Target (SET) **		41,000	335,000	950,000	280,000	1,606,000	6,000,000	
Test Fishing (TF)*****		250	3,960	10,200	3,000	17,410	25,270	
Surplus above Adjusted SET & Test fishing		0	0	0	0	0	13,974,730	
DEDUCTIONS & TAC FOR INTERNATIONAL SHARING								
Aboriginal Fishery Exemption (AFE)		0	0	0	0	0	0	
Total Deductions (Adj. SET + TF + Available AFE)		41,250	338,960	960,200	283,000	1,623,410	6,025,270	
Available TAC for International Sharing		0	0	0	0	0	13,974,730	
UNITED STATES (Washington) TAC								
Proportionally Distributed TAC ***		16.5%	0	0	0	0	25.7%	3,591,510
U.S. Payback ***		0.0%	0	0	0	0		0
Proportionally Distributed TAC + Payback			0	0	0	0		3,591,510
Treaty Tribes Share ***		67.7%	0	0	0	0	50.0%	1,795,755
All Citizen Share		32.3%	0	0	0	0	50.0%	1,795,755
CANADA TAC								
Aboriginal Fishery Exemption (AFE)			0	0	0	0		0
Canadian TAC + AFE			0	0	0	0		10,383,220
CATCH-TO-DATE								
Test		250	3,940	9,700	2,620	16,500	11,760	
Treaty Tribes (Wash.) / Ceremonial (TRB)		0	30	1,640	1,680	3,350	264,600	
All Citizen (Wash.)		0	0	0	0	0	83,640	
Other (Wash.)****		0	20	270	230	520		
Washington		0	50	1,910	1,910	3,880	348,230	
First Nations Catch (including AFE)		0	0	0	0	0	3,490	
Planned Charter & Recreational Shares		20	190	420	57	683	0	810
Other****		170	2,370	12,060	50	14,660	0	0
Total Commercial (including FN EO/Demo*****)		0	0	0	0	0	0	138,800
Canada		190	2,560	12,480	107	15,340	143,110	
Total Catch in All Fisheries		440	6,550	24,090	4,637	35,720	503,100	
Exploitation Rate (catch-to-date / run size)		1.1%	2.0%	2.5%	1.7%	2.2%	2.5%	
Exploit. Rate with fishery-induced mortality included		1.2%	2.1%	2.9%	2.1%	2.5%		
CATCH REMAINING (BALANCE)								
Washington		0	-50	-1,910	-1,910	-3,880	3,243,280	
Canada		-190	-2,560	-12,480	-107	-15,337	10,240,110	
Balance Remaining [below share / -above share]		-190	-2,610	-14,390	-2,017	-19,207	13,483,390	

* Given the 2022 pre-season forecasts of abundances, fisheries decisions that could impact the Early Stuart sockeye management group will be based on Low Abundance Exploitation Rate (LAER) limit of 10%.

The intent of LAER is to allow for limited fisheries directed on co-migrating stocks or species, but also may permit limited harvest in some cases. The application of the LAER obviates the need for management adjustments for this group.

** The adjusted SET is the lesser of the run size or the sum of the MA + TAM - defined SET.

*** Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share).

Pink: 25.7% of the TAC - payback (maximum of 5% of share)

**** May include unauthorized directed retention or unauthorized bycatch retention in fisheries directed at other species.

***** EO = FN Economic Opportunity fisheries; Demo = FN Demonstration fisheries.

***** The test fishing deduction was updated in-season to 42,579 on September 2, 2022.

2023 Fraser Sockeye Test Fishing & Escapement Summary

Area/Gear Location From A20	Fraser River								
	A29-13 GN	A29-16 GN	Whon CPUE	Qualark			Mission Hydroacoustics		Hells Gate
	Cottonwood (+5 days)	Whonnock (+6 days)	Estimate (+6 days)	GN Catch (+8 days)	Estimate ¹	Method ²	Estimate ³ (+6 days)	Method ⁴	Estimates ⁵ (+10 days)
18-Aug	158	144	11.38	59	29,315	RB + LB	63,200	A1+S1+M2+A2	No Count
19-Aug	95	180	14.40	28	28,526	RB + LB	56,000	A1+S1+M2+A2	No Count
20-Aug	121	160	12.80	35	56,228	RB + LB	85,900	A1+S1+M2+A2	No Count
21-Aug	72	43	3.13	56	64,944	RB + LB	88,200	A1+S1+M2+A2	No Count
22-Aug	61	46	3.68	42	49,102	RB + LB	86,200	A1+S1+M2+A2	No Count
23-Aug	29	50	4.00	47	45,533	RB + LB	57,900	A1+S1+M2+A2	1,140
24-Aug	33	51	3.98	10 (3 sets)	41,640	RB + LB	62,100	CPUE-Wh-Avg	320
25-Aug	6	63	4.92	29	52,053	RB + LB	56,700	CPUE-Wh-Avg	No Count
26-Aug	7	36	2.88	58	72,570	RB + LB	47,800	CPUE-Wh-Avg	No Count
27-Aug	8	28	2.13	27	43,040	RB + LB	30,300	CPUE-Wh-Avg	11,940
28-Aug	5	16	1.28	20	32,662	RB + LB	23,700	CPUE-Wh-Avg	No Count
29-Aug	6	19	1.51	25	24,022	RB + LB	19,900	CPUE-Wh-Avg	12,800
30-Aug	27	17	1.33	10	9,274	RB + LB	18,100	CPUE-Wh-Avg	7,370
31-Aug	19	12	0.91	13	31,506	RB + LB	14,700	CPUE-Wh-Avg	5,380
1-Sep	20	8	0.64	4	16,993	RB + LB	13,100	CPUE-Wh-Avg	No Count
2-Sep	5	10	0.80	4	14,740	RB + LB	18,300	CPUE-Wh-Avg	2,100
3-Sep	3	20	1.60	2	8,703	RB + LB	18,300	CPUE-Wh-Avg	1,820
4-Sep	3	8	0.64	5	30,428	RB + LB	26,400	CPUE-Wh-Avg	1,880
5-Sep	7	27	2.16	11	78,909	RB + LB	25,000	CPUE-Wh-Avg	2,040
6-Sep	8	17	1.37	5	49,293	RB + LB	23,100	CPUE-Wh-Avg	3,660
7-Sep	6	4	0.31	8			15,200	CPUE-Wh-Avg	2,950
8-Sep									
9-Sep									

¹ Qualark escapement estimate - does not include Chilliwack, Pitt, Harrison, Birkenhead, Big Silver, Weaver, and Cultus

² Qualark source:

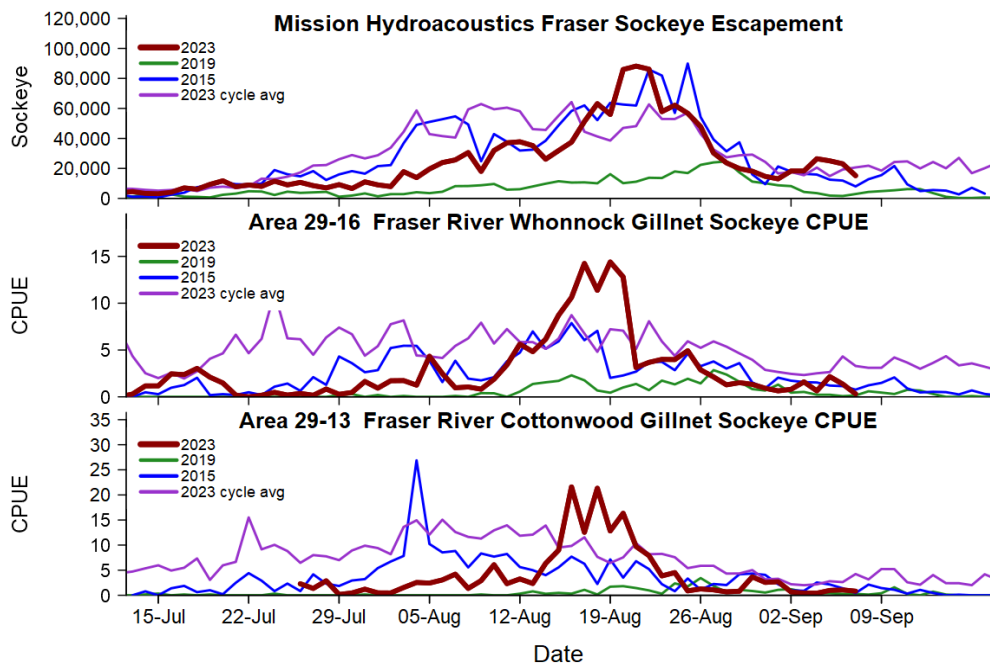
³ Mission escapement estimate - does not include Pitt

⁴ Mission source:

A1+S1+M2+A2 = Left-bank ARIS (A1) + Left bank split-beam (S1) + Mobile ARIS (M2) + Right-bank ARIS (A2)

CPUE-Wh-Avg = 3-day average Whonnock CPUE x Expansion line

⁵ Daily Hells Gate abundance estimate; actual daily count has been expanded.



2023 Fraser Pink Test Fishing & Escapement Summary

Area/Gear Location From A20	Fraser River								
	A29-13 GN Cottonwood	A29-16 GN Whonnock	Whon CPUE Estimate	GN Catch	Qualark Estimate ¹	Method ²	Mission Hydroacoustics Estimate ³	Method ⁴	Hell's Gate Estimates ⁵
18-Aug	3	3	0.23	2	994	RB+LB	16,820	BB-CPUE-Avg	No Count
19-Aug	6	14	1.12	1	951	RB+LB	21,870	BB-CPUE-Avg	No Count
20-Aug	13	28	2.24	1	1,607	RB+LB	19,720	BB-CPUE-Avg	No Count
21-Aug	16	9	0.65	0	0	RB+LB	45,010	A1+S1+M2+A2	No Count
22-Aug	12	13	1.04	6	7,015	RB+LB	108,440	A1+S1+M2+A2	No Count
23-Aug	6	31	2.48	6	5,692	RB+LB	165,320	A1+S1+M2+A2	39,580
24-Aug	34	17	1.31	2 (3 sets)	7,571	RB+LB	120,190	A1+S1+M2+A2	4,290
25-Aug	26	23	1.81	7	12,565	RB+LB	56,460	A1+S1+M2+A2	No Count
26-Aug	14	46	3.68	41	51,300	RB+LB	62,410	A1+S1+M2+A2	No Count
27-Aug	50	40	3.05	45	71,734	RB+LB	70,460	A1+S1+M2+A2	31,780
28-Aug	48	60	4.81	22	44,094	RB+LB	154,870	A1+S1+M2+A2	No Count
29-Aug	145	80	6.35	43	41,317	RB+LB	239,120	A1+S1+M2+A2	51,240
30-Aug	97	92	7.32	66	61,206	RB+LB	302,670	A1+S1+M2+A2	44,450
31-Aug	137	34	2.58	52	126,025	RB+LB	243,740	A1+S1+M2+A2	35,060
1-Sep	130	88	7.04	62	263,386	RB+LB	216,500	A1+S1+M2+A2	No Count
2-Sep	86	226	18.08	71	261,637	RB+LB	561,640	A1+S1+M2+A2	307,070
3-Sep	14	117	9.36	40	174,053	RB+LB	750,020	A1+S1+M2+A2	293,070
4-Sep	42	165	13.20	54	328,619	RB+LB	559,760	A1+S1+M2+A2	275,210
5-Sep	91	73	5.84	52	373,026	RB+LB	325,750	A1+S1+M2+A2	250,940
6-Sep	78	48	3.86	36	354,913	RB+LB	219,520	A1+S1+M2+A2	276,850
7-Sep	80	34	2.68	38			296,310	A1+S1+M2+A2	411,600
8-Sep									
9-Sep									

¹ Qualark escapement estimate - does not include Chilliwack, Pitt, Harrison, Birkenhead, Big Silver, Weaver, and Cultus

² Qualark source:

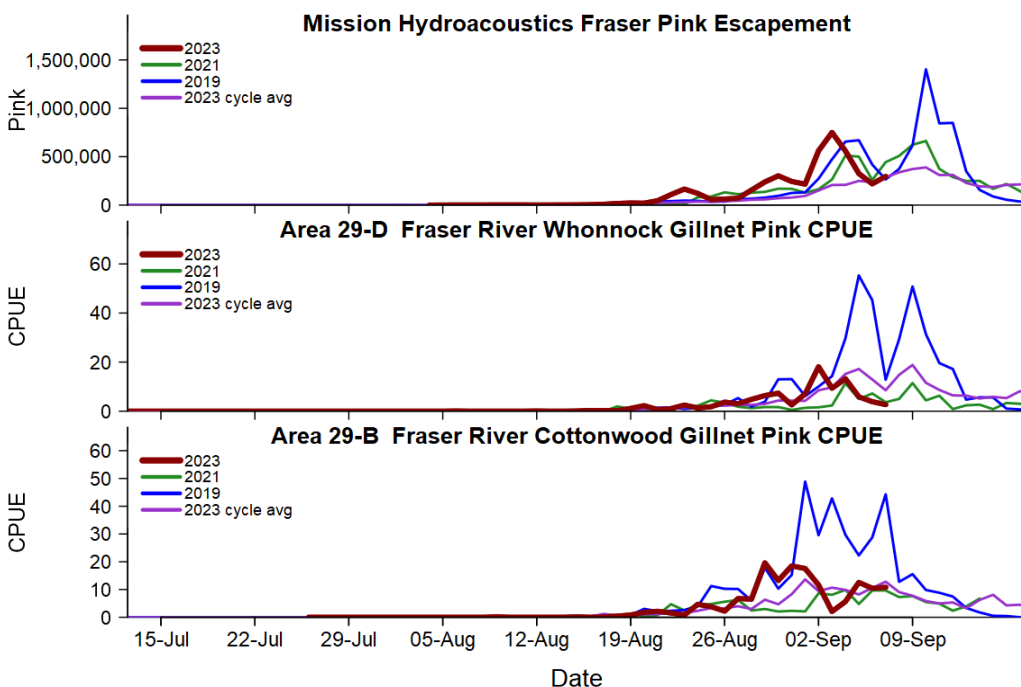
³ Mission escapement estimate - does not include Pitt

⁴ Mission source:

BB-CPUE-Avg = 3-day average Brownsville CPUE x Expansion Line

A1+S1+M2+A2 = Left-bank ARIS (A1) + Left bank split-beam (S1) + Mobile ARIS (M2) + Right-bank ARIS (A2)

⁵ Daily Hells Gate abundance estimate; actual daily count has been expanded.



Fraser Sockeye: Qualark Passage Estimate and Mission-based Projection

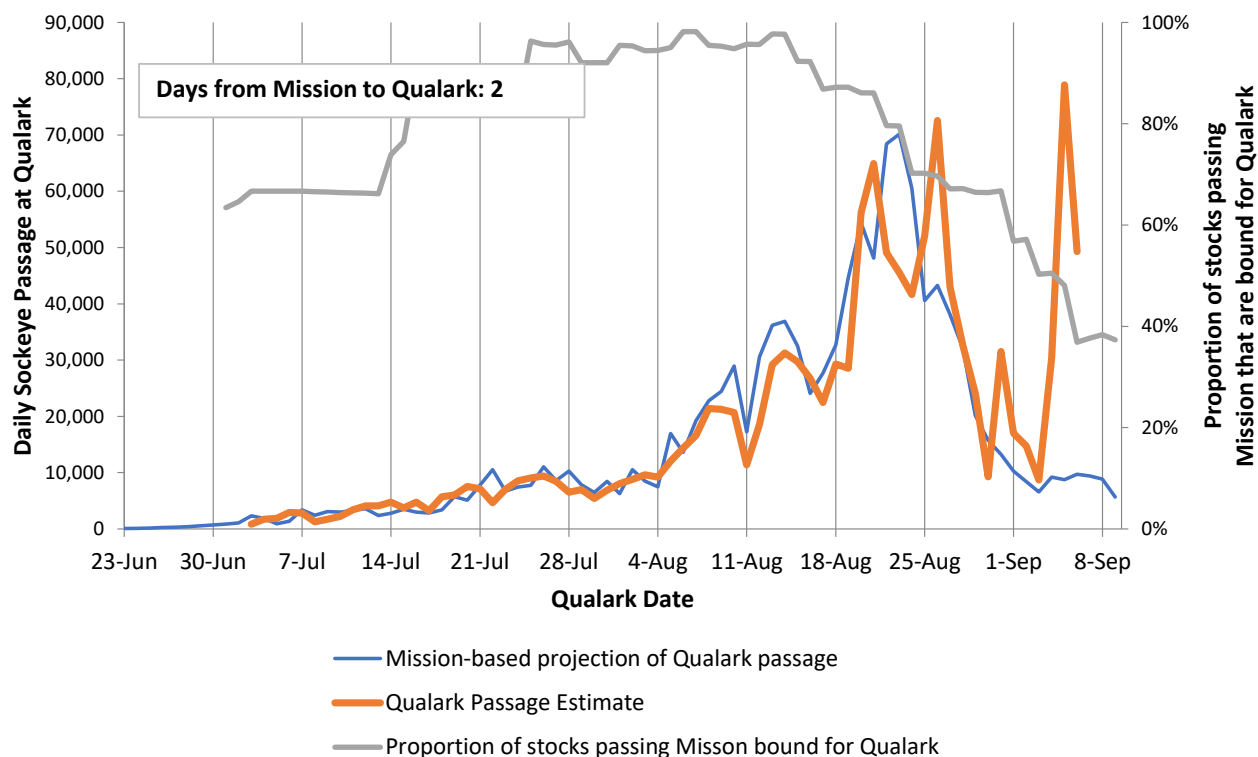
Year: **2023**

Date: 8/Sep/23

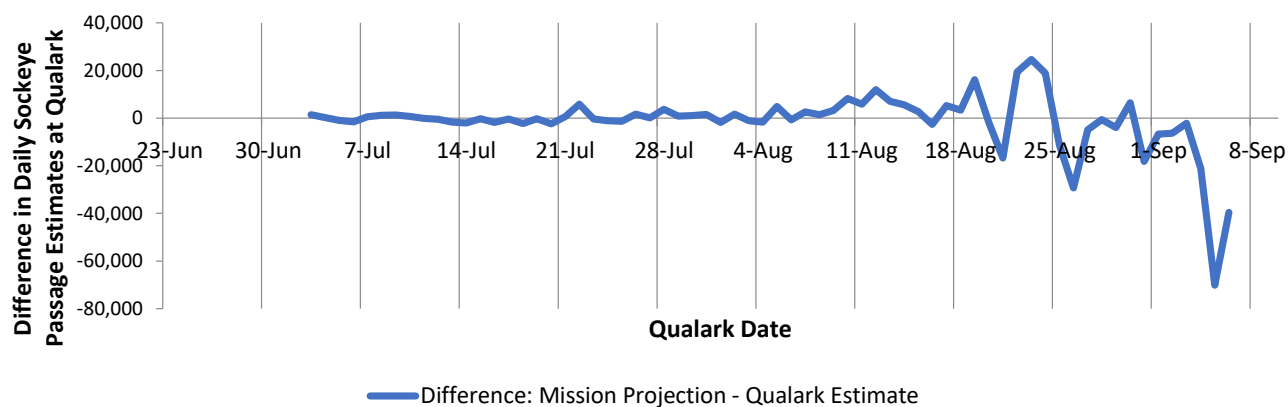
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	All Days	Common Days
Mission projection	1,174,533	1,145,968
Qualark estimate	1,233,906	1,233,906
	Difference	-87,938
	%Difference	(8%)

Compare Qualark Passage Estimate and Mission-based Projection



Difference between Qualark Passage Estimate and Mission-based Projection



2023 Fraser River Sockeye Salmon Stock identification Review

Recent stock composition estimates for sockeye salmon

Fishing						Fraser-only Stock Proportions by Reporting Group ⁴ (%)													Age (%)				
						Early Stuart	Early Summer					Summer					Late			Overall Stocks			
						Early Stuart	Nadina Bowron				Early Summer sub-total	Summer				Summer sub-total	Late			Late sub-total	Age-4 ₂		
							Chilli-wack	Pitt Alouette	Gates Nahat-latch	Early Thompson		Harri-son	Late Stuart	Chilko Ques-nel	Raft North Thompson		Birken-head Big Silver	Late Shuswap Portage	Weaver Cultus				
Area/Gear ¹	Sector ²	Date	Type ³	Size (n)	%Fraser	Early Stuart	Chilli-wack	Coquit-lam	Taseko	Thomp-son	Early Summer sub-total	Widg-eon	Late Stuart	Chilko Ques-nel	Raft North Thompson	Summer sub-total	Birken-head Big Silver	Late Shuswap Portage	Weaver Cultus	Late sub-total	Age-4 ₂		
Johnstone Strait & Queen Charlotte Strait																							
A12 ps	tf	Aug 30	DNA	85	100%	0%						0%	10%		46%	1%	57%	11%	16%	15%	43%	52%	
A12 ps	tf	Sep 2	DNA	92	100%	0%						0%	19%		49%		68%	9%	6%	17%	32%	29%	
A12 ps		Sep 8	Prediction	1	100%	0%						0%	10%		46%	0%	56%	10%	10%	24%	44%	NA	
Juan de Fuca Strait & Washington & Other																							
A20 ps		Sep 8	Prediction	1	100%	0%						0%	1%	10%	43%	4%	58%	9%	4%	29%	42%	NA	
In-river																							
Hop-Qua gn	tf	Aug30-Sep1	DNA	27	100%	0%						4%	4%	17%		72%	90%	7%			7%	NA	
Hop-Qua gn	tf	Sep2-4	DNA	11	100%	0%						9%	9%	17%		66%	83%	8%			8%	NA	
AB gn	tf	Sep1-3	DNA	37	100%	0%							0%	6%	13%	32%	51%	38%		11%	49%	62%	
AB gn	tf	Sep4-6	DNA	51	100%	0%						1%	1%	4%		16%	4%	24%	45%	14%	16%	75%	56%

2023 Fraser River Pink Salmon Stock identification Review

Recent stock composition estimates for pink salmon

Fishing					DNA % Estimates by Group		
Area/Gear ¹	Sector ²	Date	Type ³	Sample Size (n)	Canada		
					Fraser River	Washington	South Coast
Johnstone Strait							
A12 PS	TF	Sep1	DNA	96	52%	42%	6%
A12 PS	TF	Sep4	DNA	89	55%	38%	7%
A12		Sep09	Prediction	1	67%	23%	10%
Juan de Fuca Strait							
A20		Sep09	Prediction	1	74%	22%	4%
Washington							
A7		Sep09	Prediction	1	88%	8%	4%
A7A		Sep09	Prediction	1	86%	8%	6%

Notes for sockeye and pink tables:

¹ BB GN=29_13 (Cottonwood,Brownsville), AT = Alaska Twist, AB GN=29_16 (Whonnock), MA FW=Matsqui Fish Wheel, QU GN=Qualark

² TF=sample from test fishery catch, CM=sample from commercial catch, C&S=ceremonial & subsistence catch, FSC=food, social, & ceremonial catch, rec= recreational catch

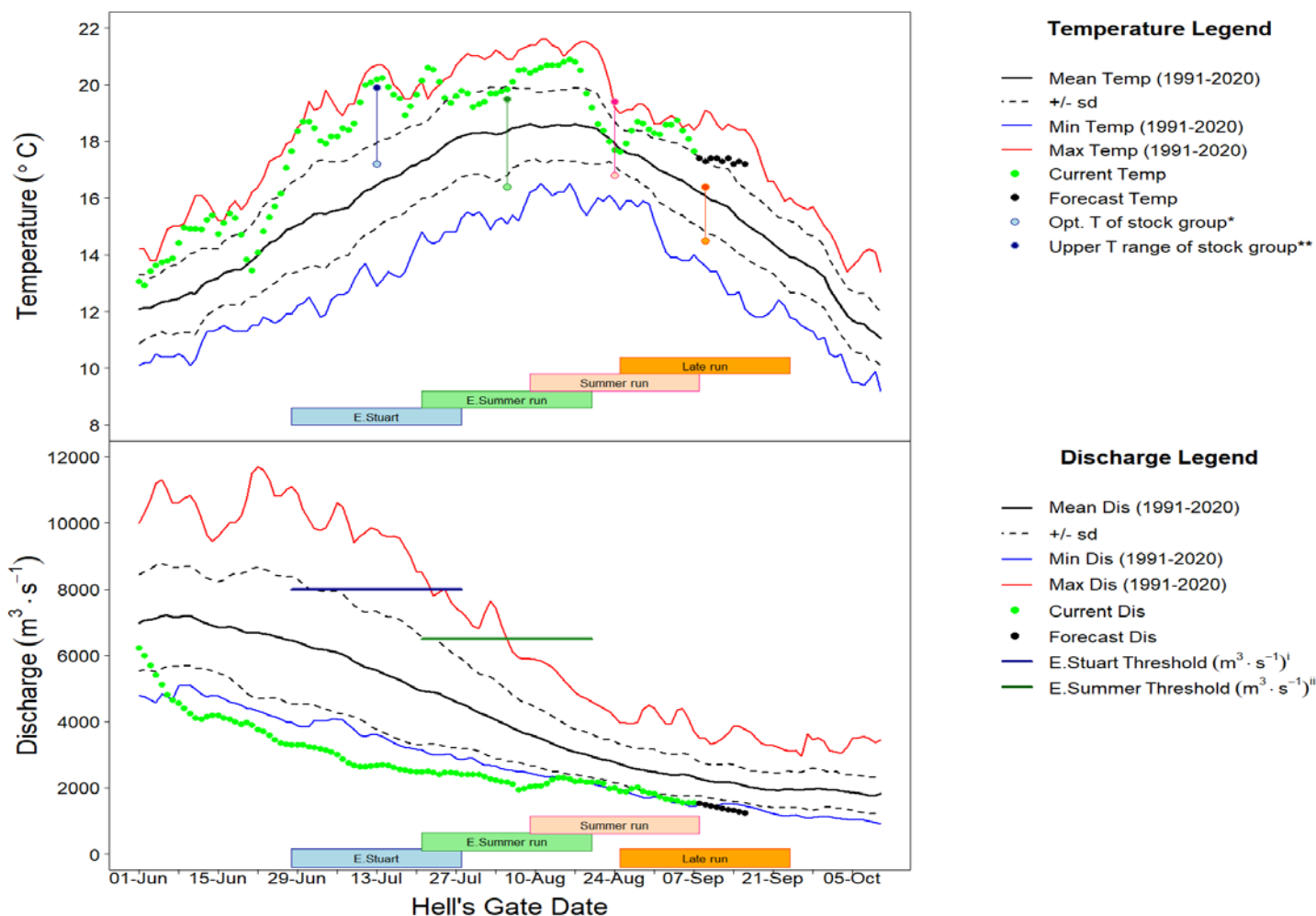
³ Predictions for sockeye are multinomial extrapolations of current year data to 5 days after the last observation; Predictions for pink salmon are projections of stock compositions based on historic and current data

⁴ Further information relating stock group descriptions to spawning ground locations and population definitions can be found at http://www.psc.org/FRPWeb/Escapement/PSC_Fraser_Sockeye_Stock_Group_Definitions.pdf

Results in grey text have been presented to the Panel previously

Observed Fraser River Temperature at Qualark for 07-Sep	17.7°C
Average (1991-2020) Historical Temperature on this day	16.3°C
Deviation from Average	1.3°C
Forecast Temperature for 13-Sep-23	17.4°C
The forecast in Kamloops is for above average air temperature. The forecast for Prince George is for for above average air temperature after Sept. 8.	

Observed Fraser River Discharge at Hope for 07-Sep	1561 m ³ ·s ⁻¹
Average (1991-2020) Historical Discharge on this day	2329 m ³ ·s ⁻¹
% above or below Historical Discharge	-33%
Forecast Discharge for 13-Sep-23	1349 m ³ ·s ⁻¹
The forecast in Kamloops is for no precipitation. The forecast in Prince George is for 2 mm of precipitation.	



Run timing bars represent a 31 day spread of the run centered around the Hell's Gate date. Hell's gate timing is 5 days from Mission for Early Stuart and Late run; and 4 days from Mission for Early Summer and Summer run. ⁱpMA is the proportional increase to spawning escapement targets to help ensure targets are achieved. ⁱⁱ%DBE is %difference between estimates of potential spawning escapement and spawning escapement. *This is the optimum temp for aerobic swimming - T_{opt} (Eliason et al. (2011). Science 332: 109-112)**This is the upper range of the optimum temp for aerobic swimming - T_{pejus}. ⁱDischarge threshold of 8000cms for Early Stuart from Macdonald (2000). Can. Tech. Rep. Fish. Aquat. Sci. 2315: 120p. ⁱⁱDischarge threshold of 6500cms for Early Summer run from Macdonald et al. (2010). Trans. Am. Fish. Soc. 139: 768-782. 19 days of T & Q data are required to calculate a pMA - 15 days before the Hell's Gate Date and 3 days after. MA estimates can be calculated 4 days after the Area 20 date.

Current Temperatures						
Upriver of Slide	Map #	06-Sep	Daily Mean	Historic Mean	Deviation from Historical Mean	Historic Year Range
<u>Fraser River Mainstem</u>						
	1	Fraser River @ Qualark	17.7	16.5	1.2	1991-2020
	2	Fraser River @ Texas Creek	16.4	15.5	0.9	2006-2022
	3	Fraser River @ Big Bar Creek	NA	NA	NA	2019-2022
►	4	Fraser River @ Marguerite	15.7	15.2	0.5	2015-2022
►	5	Upper Fraser @ Shelley	13.9	12.3	1.6	1994-2022
<u>Fraser River Tributaries</u>						
	6	Thompson R. @ Ashcroft	18.7	17.7	1.0	1995-2022
	7	South Thompson @ Chase	18.7	18.5	0.2	1994-2022
	8	North Thompson @ McLure	15.0	14.0	1.0	2006-2022
►	9	Quesnel R. @ Quesnel	15.5	16.1	-0.6	2000-2022
►	10	Nechako R. @ Isle Pierre	15.5	16.1	-0.6	2006-2022
►	11	Stuart R. @ Ft. St. James	15.9	15.6	0.3	2000-2022

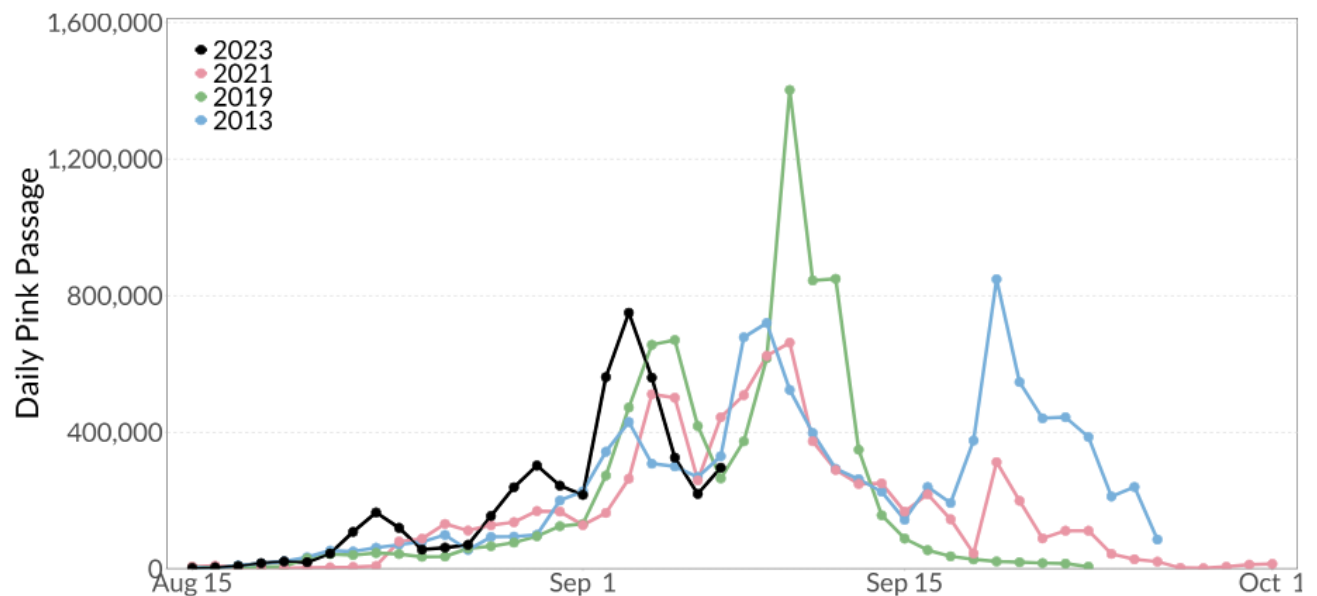


Pink In-season Update

September 8, 2023

Current Trends – Mission Passage

- The timing of the initial bump of pink salmon into the river is consistent with other years
- It is still early in the river migration for pink salmon. Even in years with low abundance and early marine timing, more than 50% of the escapement is still expected to come
- Similar to patterns in marine abundance, the distribution at Mission is typically bi-modal or multi-modal
- Not uncommon for pink salmon to redistribute between marine approaches and the river (cannot always align “peaks” in daily migration profiles)
- Cannot distinguish between <10 million, 10-20 million, or >20 million runs at this point in the passage – it will depend on what is left to come
- Figure courtesy of: [FRP Application \(shinyapps.io\)](https://shinyapps.io/FRP/)



2023 Fraser River run size and timing estimates

The information presented on this page has been prepared by PSC Secretariat Staff. All in-season estimates of run size and timing should be considered draft preliminary estimates unless adopted by the Fraser River Panel.

Preseason forecasts, inseason estimates, and official estimates of run size and associated timing

	Run Size						Run size components				Run Timing ¹					
	Inseason Adopted	Preseason Forecast	Inseason estimate	Inseason 80% Pls ²		Method	Catch + Escapement	6-day Projection ³	Seaward Abundance	Migration Delay	Inseason Adopted	Preseason Forecast	Inseason estimate	Inseason 80% Pls ²		Method
				10% PI	90% PI									10% PI	90% PI	
Total Fraser sockeye	1,606,000	1,564,000	● 1,681,000				1,562,000	15,000	1,000	103,000	08-Aug	16-Aug	14-Aug			Recon
Early Stuart Run	41,000	23,000	✓ 41,000	41,000	41,000	Recon	41,000	0	0	0	02-Jul	07-Jul	02-Jul	02-Jul	02-Jul	Recon
Early Summer Run	335,000	186,000	✓ 326,000	327,000	327,000	Sum	327,000	0	0	0	26-Jul	06-Aug	27-Jul	27-Jul	27-Jul	Recon
Chilliwack		2,000	✓ 32,000	32,000	32,000	Recon	32,000	0	0	0		20-Jul	05-Jul	05-Jul	05-Jul	Recon
Pitt/Nadina Group ⁴		123,000	✓ 247,000	247,000	247,000	Recon	247,000	0	0	0		05-Aug	26-Jul	26-Jul	26-Jul	Recon
Early Thompson ⁵		61,000	✓ 48,000	48,000	48,000	Recon	48,000	0	0	0		09-Aug	05-Aug	05-Aug	05-Aug	Recon
Summer Run	950,000	1,167,000	✓ 910,000	906,000	916,000	Sum	902,000	7,000	0	0	13-Aug	17-Aug	14-Aug	14-Aug	14-Aug	Recon
Harrison / Widgeon		51,000	✓ 42,000	42,000	42,000	Recon	42,000	0	0	0		12-Aug	02-Aug	30-Jul	05-Aug	Model
Late Stuart / Stellako		196,000	✓ 151,000	150,000	152,000	Recon(2)	149,000	2,000	0	0		13-Aug	12-Aug	12-Aug	12-Aug	Recon(2)
Chilko		591,000	✓ 567,000	566,000	570,000	Recon(2)	564,000	3,000	0	0		17-Aug	14-Aug	14-Aug	14-Aug	Recon(2)
Quesnel		319,000	✓ 125,000	124,000	128,000	Recon(2)	123,000	2,000	0	0		19-Aug	14-Aug	14-Aug	14-Aug	Recon(2)
Raft / North Thompson		10,000	✓ 24,000	24,000	24,000	Recon	24,000	0	0	0		23-Aug	16-Aug	16-Aug	16-Aug	Recon
Late Run	280,000	188,000	● 404,000	295,000	466,000	Sum	292,000	8,000	1,000	103,000	17-Aug	24-Aug	18-Aug	17-Aug	19-Aug	Weight
Birkenhead Group		92,000	✓ 212,000	208,000	221,000	Recon(2)	206,000	5,000	1,000	0		24-Aug	18-Aug	18-Aug	18-Aug	Recon(2)
L.Shuswap / Weaver Gr.		96,000	◇ 192,000	87,000	245,000	Recon(2)	86,000	3,000	0	103,000		24-Aug	17-Aug	13-Aug	20-Aug	Marine N
Fraser Pink salmon	20,000,000	6,135,000	◇ 20,000,000	10,500,000	31,300,000	Wt. of Evid.	5,090,000		14,910,000		20-Aug	25-Aug	21-Aug	19-Aug	23-Aug	Model

¹ Run timing refers to the date when 50% of the run migrated past the Area 20 reference point.

² 80% Probability Interval: there exists an 80% chance that the true abundance lies within this interval

³ Normally based on test fishery data. Based on Model if Method = Recon(2).

⁴ Pitt / Alouette / Coquitlam / Nadina / Bowron / Gates / Nahatlatch / Taseko

⁵ Early South Thompson / North Barriere.

Methods for run size & timing estimation

Model	Run size assessment model (median)
Recon	Catch + escapement + 6-day test fish projection + model seaward projection
Recon(2)	Catch + escapement + model projections
Wt. of Evid.	Weight of evidence table
Sum	Sum of individual groups
Weight	Weighted average of individual groups
Marine N	Reconstruction of CPUE-based marine abundances

Run Size Uncertainty Legend[†]

- ✓

≥ 95% of the run size has been accounted for in catch + escapement. Clear indication of run size; minor run size updates still expected
- ≥ 70% of the run size has been accounted for in catch + escapement. Good indication of run size; peak fo the run has been observed at Mission, uncertainty relates to seaward abundance
- ▲

≥ 50% of the run size has been accounted for in catch + escapement. Decent indiciation of run size; ≥ 50% confirmed at Mission
- ◇

< 50% of the run size has been accounted for in catch + escapement. Uncertain or early indiciation of run size based on marine data

[†] The Run Size Uncertainty Indicator is a categorical indication of the degree of uncertainty present in the run size estimate. Estimates are categorized quantitatively based on the proportion of the run that has been accounted for with high certainty in catch + escapement.

Predicted and Reported Fraser Sockeye and Pink Impacts

Date: 2023-09-08

Predicted vs. Observed² catches in Areas 4B, 5, 6C³

Date	Predicted Fishery Impacts			Observed Fishery Impacts			
	Predicted Fraser pink catch	Predicted landed Fraser sockeye catch	Predicted Fraser sockeye FIMs ⁴	Observed Fraser pink catch	Observed landed Fraser sockeye catch	Observed Fraser sockeye FIMs ⁴	Observed total Fraser sockeye mortality ¹
TOTAL	7,141	297	42	0	0	0	0
19-Aug	269	103					
20-Aug	269	97					
21-Aug	269	97					
22-Aug	249		7				
23-Aug	242		6				
24-Aug	242		6				
25-Aug	242		6				
26-Aug	1,324		5				
27-Aug	1,324		4				
28-Aug	1,324		4				
29-Aug	1,324		1				
30-Aug	20		1				
31-Aug	20		1				
01-Sep	20		1				
02-Sep	1		0				
03-Sep	1		0				
04-Sep	1		0				
05-Sep	0		0				
06-Sep	0		0				

Predicted vs. Observed² Treaty Tribe catches in Areas 6, 7, 7A³

Date	Predicted Fishery Impacts			Observed Fishery Impacts			
	Predicted Fraser pink catch	Predicted landed Fraser sockeye catch	Predicted Fraser sockeye FIMs ⁴	Observed Fraser pink catch	Observed landed Fraser sockeye catch	Observed Fraser sockeye FIMs ⁴	Observed total Fraser sockeye mortality ¹
TOTAL	1,881,072	5,525	1,274	264,537	3,877	659	4,537
19-Aug							
20-Aug	288,719	5,525		51,198	3,353		3,353
21-Aug							
22-Aug							
23-Aug	47,670		236	34,203	360	71	431
24-Aug	54,864		217	3,122	159	6	165
25-Aug	42,956		198	62,140		273	273
26-Aug	63,945		152	23,534		101	101
27-Aug	82,950		136	19,579		86	86
28-Aug	202,821		121	33,614		88	88
29-Aug	345,373		106	6,338		7	7
30-Aug	539,184		47	16,699	5	18	23
31-Aug	182,423		19				
01-Sep	18,347		16	8,240		5	5
02-Sep	8,086		7				
03-Sep	3,274		5	5,871		4	4
04-Sep	164		4				
05-Sep	145		4				
06-Sep	151		6				

Predicted vs. Observed² All Citizen catches in Areas 7, 7A³

Date	Predicted Fishery Impacts			Observed Fishery Impacts			
	Predicted Fraser pink catch	Predicted landed Fraser sockeye catch	Predicted Fraser sockeye FIMs ⁴	Observed Fraser pink catch	Observed landed Fraser sockeye catch	Observed Fraser sockeye FIMs ⁴	Observed total Fraser sockeye mortality ¹
TOTAL	1,597,146	0	1,095	85,723	0	21	21
23-Aug	48,076		192	2,528		0	0
24-Aug	55,646		177	8,115		20	20
25-Aug	43,244		162	1,774		0	0
26-Aug	66,577		136	23,613		1	1
27-Aug	84,275		121	384		0	0
28-Aug	197,293		107	8,063		0	0
29-Aug	375,910		94	3,492		0	0
30-Aug	518,380		48	826		0	0
31-Aug	170,094		19	375		0	0
01-Sep	17,653		16	4,505		0	0
02-Sep	7,846		7	16,962		0	0
03-Sep	3,038		4	14,948		0	0
04-Sep	3,038		4	61		0	0
05-Sep	3,038		4	0		0	0
06-Sep	3,038		4	77		0	0

Predicted⁵ vs. Observed Canadian Commercial Area 29 H (Troll) and B (Seine) Catches

Date	Predicted Fishery Impacts			Observed Fishery Impacts			
	Predicted Fraser pink catch	Predicted landed Fraser sockeye catch	Predicted Fraser sockeye FIMs ⁴	Observed Fraser pink catch	Observed landed Fraser sockeye catch	Observed Fraser sockeye FIMs ⁴	Observed total Fraser sockeye mortality ¹
TOTAL	140,000	0	557	131,232	0	641	641
23-Aug							
24-Aug							
25-Aug							
26-Aug							
27-Aug							
28-Aug							
29-Aug	500		2	181		3	3
30-Aug	500		2	200		1	1
31-Aug							
01-Sep							
02-Sep							
03-Sep							
04-Sep	50,500		252	16,729		31	31
05-Sep	50,500		252	10,800		32	32
06-Sep	38,000		49	103,321		574	574

¹Total sockeye mortality includes both landed catch and fishing induced mortality

²Catches are reported by landing date and may not align with day of fishery opening

³Observations can vary from predictions due to changes in proposed vs. observed effort, variation in catchability, and uncertainty regarding estimates of vulnerable abundance

⁴Fishing induced mortality rates vary by gear type. Gillnet = 60% Purse seine = 25% Reefnet = 0.5%

⁵Predicted catches and FIMs for Sept 6 as reported to PSC by A. Keizer on Sept 5, 2023

Fraser River Panel Regulatory Control Periods for 2023

Canada

Area/Gear	Period Closed Unless Opened by the FRP
	(Extend from a Sunday through a Saturday, both dates inclusive)
20-1, 3 and 4 net	June 25 - September 23
20-1, 3 and 4 troll	June 25 - September 23
17, 18 net	June 25 – September 30
18-1, 4 and 11 troll	June 25 - September 30
29 net	June 25 - October 14
29 troll	June 25 - October 14

United States

Note: the periods of regulatory control are the same for U.S. Tribal and All Citizen Fisheries

Area/Gear	Period Closed Unless Opened by the FRP
	(Extend from a Sunday through a Saturday, both dates inclusive)
4B, 5, 6C drift gillnet or purse seine	June 25 - September 16
6, 6A, 7 and 7A net	June 25 – September 23
7A net lying westerly of a straight line drawn from the low water range marker in Boundary Bay on the International Boundary through the east tip of Point Roberts in the State of Washington to the East Point Light on Saturna Island in the Province of British Columbia	September 24 - October 7

File: 71007

**DRAFT AGENDA
PACIFIC SALMON COMMISSION
FRASER RIVER PANEL
Wednesday September 27, 2023 at ?? a.m.
In-person (Spring Hill Suites – Bellingham) & Via Zoom Webinar**

- 1) Roll Call (Panel and Tech members, others please email Angela, frontdesk@psc.org)
- 2) Webinar Etiquette:
 - a) Mute Phone: Please mute phone unless you are asking a question
 - b) Chat feature: Please use for questions regarding the distribution only
- 3) Agenda
- 4) Final in-season status report
 - a) Status tables (Run status, catch to date, TAC table, test fish catches and acoustics, Mission projected estimate vs. Qualark, Summary by management group of environmental conditions and pDBEs) F. Martens
 - b) Comparison of pre-season and in-season run size and timing for sockeye salmon management groups A. Phung
- 5) Upstream Escapement Report DFO
- 6) Discussion of any issues or concerns arising from 2023 Management season Panel
- 7) Approve Fraser River Panel Work Plan Panel
- 8) CSC survey Panel
- 9) Other Business
 - a) Test fishing budget update F. Martens
 - b) Regulatory control relinquishment? F. Martens/Panel
 - c) Species Composition Update – Year 1 F. Martens
 - d) Status of draft minutes and annual reports F. Martens
 - e) Next meeting (Hyatt Regency Hotel, Seattle, WA.):
 - i) FRP Meeting, January 9, ?? a.m.,
 - ii) FRTC, January 8, ?? a.m.