

File: 71007

**DRAFT AGENDA**  
**PACIFIC SALMON COMMISSION**  
**FRASER RIVER PANEL**  
**Tuesday August 8, 2023 at 10:30 am.**  
**In-person: Vancouver Airport Marriot Hotel**  
**And via Zoom Webinar**  
<https://psc-org.zoom.us/j/88416242194>

- 1) Roll Call (Panel and Tech members, others please email Julie, [ehrmantraut@psc.org](mailto:ehrmantraut@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
  - a) Migration graphs, escapement projections, run size assessments
- 7) Review any decisions on staff recommendations Panel
- 8) Other Business Panel
  - a) Matsqui Fishwheel
  - b) Pink salmon payfish
- 9) Next FRP Meeting, Friday August 11, 11:00 a.m. via Zoom Webinar Panel  
 Next Technical Committee meeting, Thursday August 10, 1:00 p.m. via Zoom TC

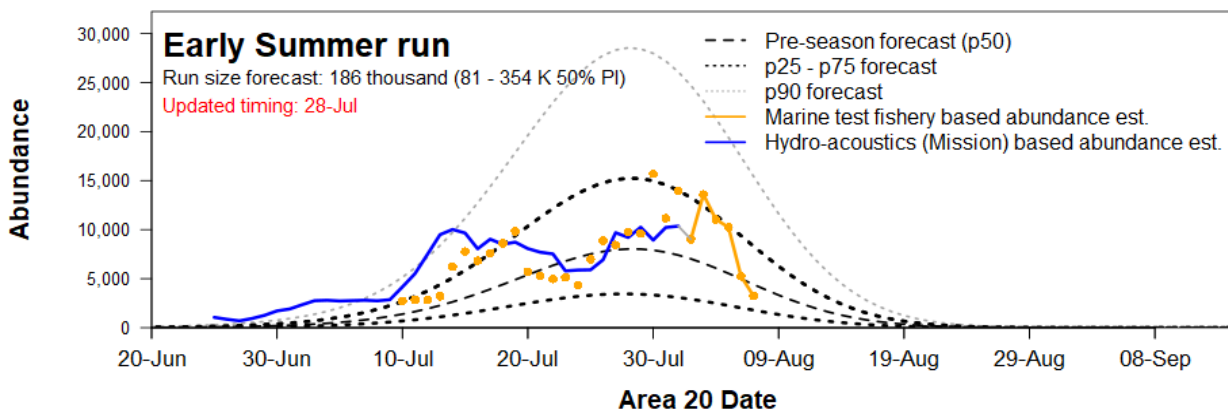
## 2023 Run status of Fraser sockeye and pink salmon

Date: Aug. 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: Aug. 6 - Aug. 12, 2023	Sockeye				Pink	
	Management Group				Total Fraser	Total Fraser
	E.Stuart	E.Summer	Summer	Late		
Mission passage (incls Pitt, Alouette, Coquitlam)	40,800	217,200	81,500	2,000	341,500	0
Catch downstream of Mission	200	3,000	2,800	300	6,300	400
Accounted Run To Date	41,000	220,200	84,300	2,300	347,800	400
Run size adopted in-season <sup>2</sup>	<b>43,000</b>	<b>240,000</b>	na	na	na	na
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	<b>2/Jul</b>	<b>20/Jul</b>	na	na	na	na
Area 20 timing expected pre-season	7/Jul	6/Aug	17/Aug	24/Aug	16/Aug	24/Aug
<b>Johnstone Str. Diversion Rate</b>	In-season 5-day average				<b>78%</b>	<b>11%</b>
	Preseason forecast of annual rate:				67%	53%

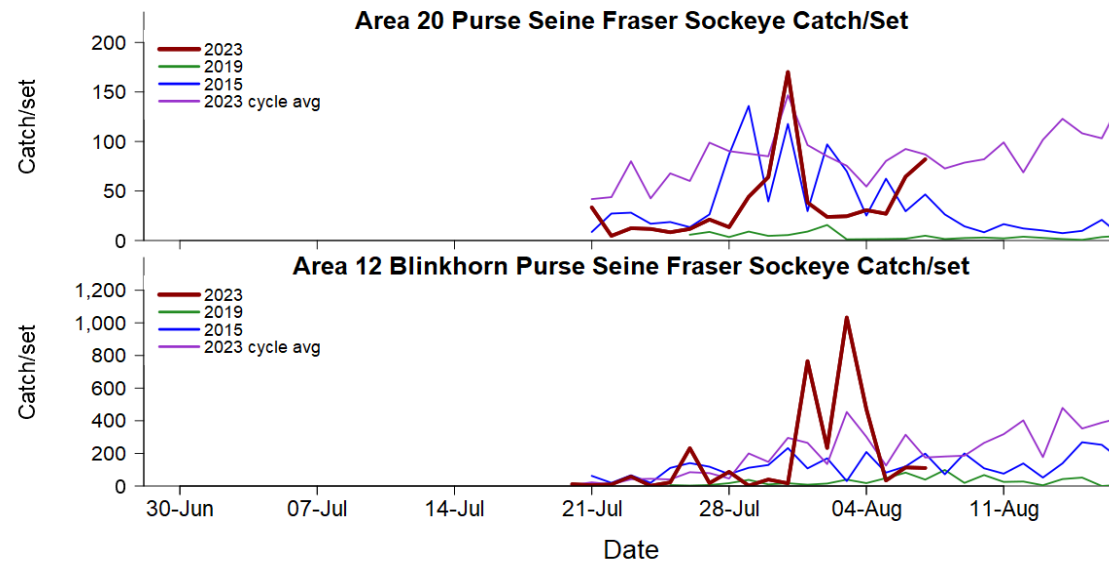
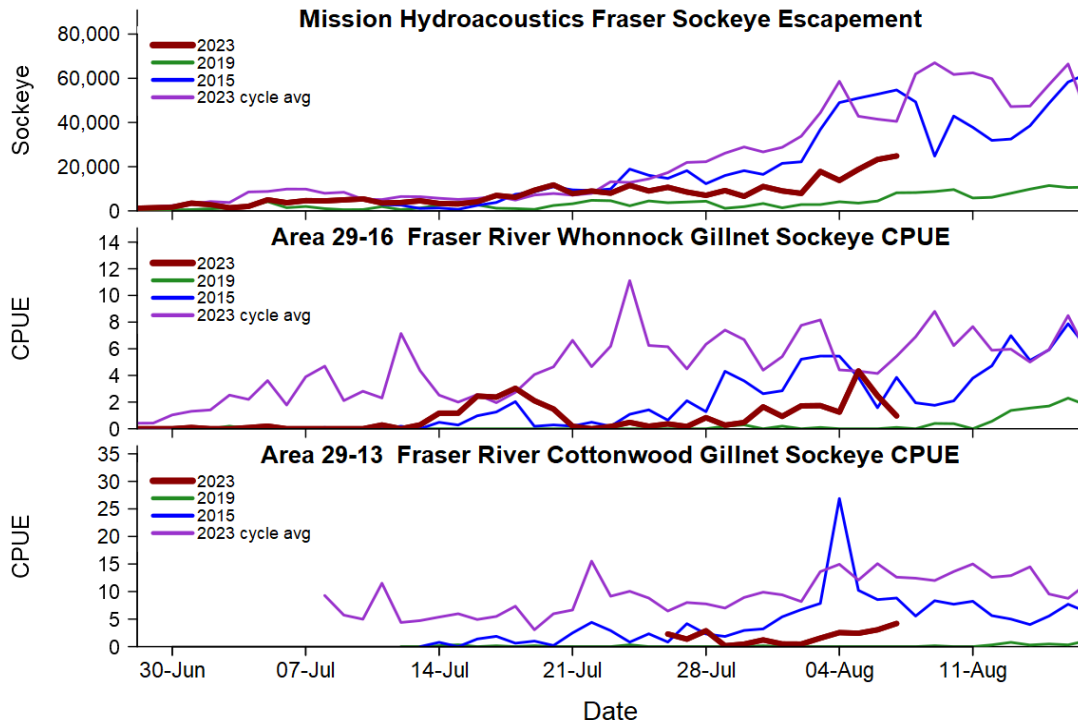
<sup>2</sup> Run sizes are usually not adopted until after the peak of the run has passed through marine test fishery areas in Juan de Fuca and Johnstone straits.



### 2023 Fraser Sockeye Test Fishing & Escapement Summary

Area/Gear Location From A20	Johnstone Strait	Juan de Fuca Strait	Fraser River									
	A12 PS Blinkhorn (-1 day)	A20 PS Port Renfrew (0 days)	A29-13 GN Cottonwood (+5 days)	A29-17 GN Brownsville Bar <sup>1</sup>	A29-16 GN Whonnock (+6 days)	Whon CPUE Estimate (+6 days)	Qualark			Mission Hydroacoustics		Hells Gate
							GN Catch (+8 days)	Estimate <sup>2</sup>	Method <sup>1</sup>	Estimate <sup>4</sup> (+6 days)	Method <sup>5</sup>	Estimates <sup>6</sup> (+10 days)
18-Jul				12	40	3.03	5 **	5,724	RB + LB	6,100	S1+M+A2	670
19-Jul				7	27	2.10	9 **	6,009	RB + LB	9,300	S1+M2+A2	900
20-Jul	67			7	18	1.48	10 **	7,528	RB + LB	11,700	S1+M2+A2	560
21-Jul	31	167		13	2	0.19	15 **	7,162	RB + LB	7,800	S1+M2+A2	1,580
22-Jul	62	28		50	0	0.00	6	4,652	RB + LB	9,000	S1+M2+A2	No Count
23-Jul	349	62 (5 sets)		48	2	0.17	12	7,054	RB + LB	8,000	S1+M2+A2	1,880
24-Jul	7 (4 Sets)	70		18	5	0.48	27 (5 sets)	8,566	RB + LB	11,500	S1+M2+A2	730
25-Jul	134	50		43	2	0.19	15	9,079	RB + LB	9,000	S1+M2+A2	1,970
26-Jul	1,390	70	16	42	4	0.37	16	9,408	RB + LB	10,700	S1+M2+A2	1,880
27-Jul	107	127	9	40	2	0.17	9	8,444	RB + LB	8,500	S1+M2+A2	5,000
28-Jul	522	81	20	36	9	0.83	10	6,521	RB + LB	7,000	S1+M2+A2	3,010
29-Jul	13	265	1	17	3	0.27	11	6,965	RB + LB	9,200	S1+M2+A2	2,660
30-Jul	239	384	3	44	5	0.47	11	5,396	RB + LB	6,600	S1+M2+A2	930
31-Jul	99	1,021	8	66	19	1.64	8	6,890	RB + LB	11,000	S1+M2+A2	890
1-Aug	4,592	230	3	36	11	0.93	16	8,067	RB + LB	9,000	S1+M2+A2	930
2-Aug	1,400	143	3	24	20	1.72	10	8,834	RB + LB	7,900	S1+M2+A2	1,080
3-Aug	6,197	147	10	44	21	1.74	14	9,597	RB + LB	17,800	S1+M2+A2	1,960
4-Aug	2,824	184	17	57	15	1.25	23	9,209	RB + LB	13,800	S1+M2+A2	2,720
5-Aug	203	162	17	136	58	4.33	10	12,073	RB + LB	18,800	S1+M2+A2	2,630
6-Aug	683	387	21	143	31	2.48	7	14,372	RB + LB	23,300	S1+M2+A2	4,220
7-Aug	663	492	28	51	11	0.97	20			24,800	S1+M2+A2	4,500
8-Aug												
9-Aug												

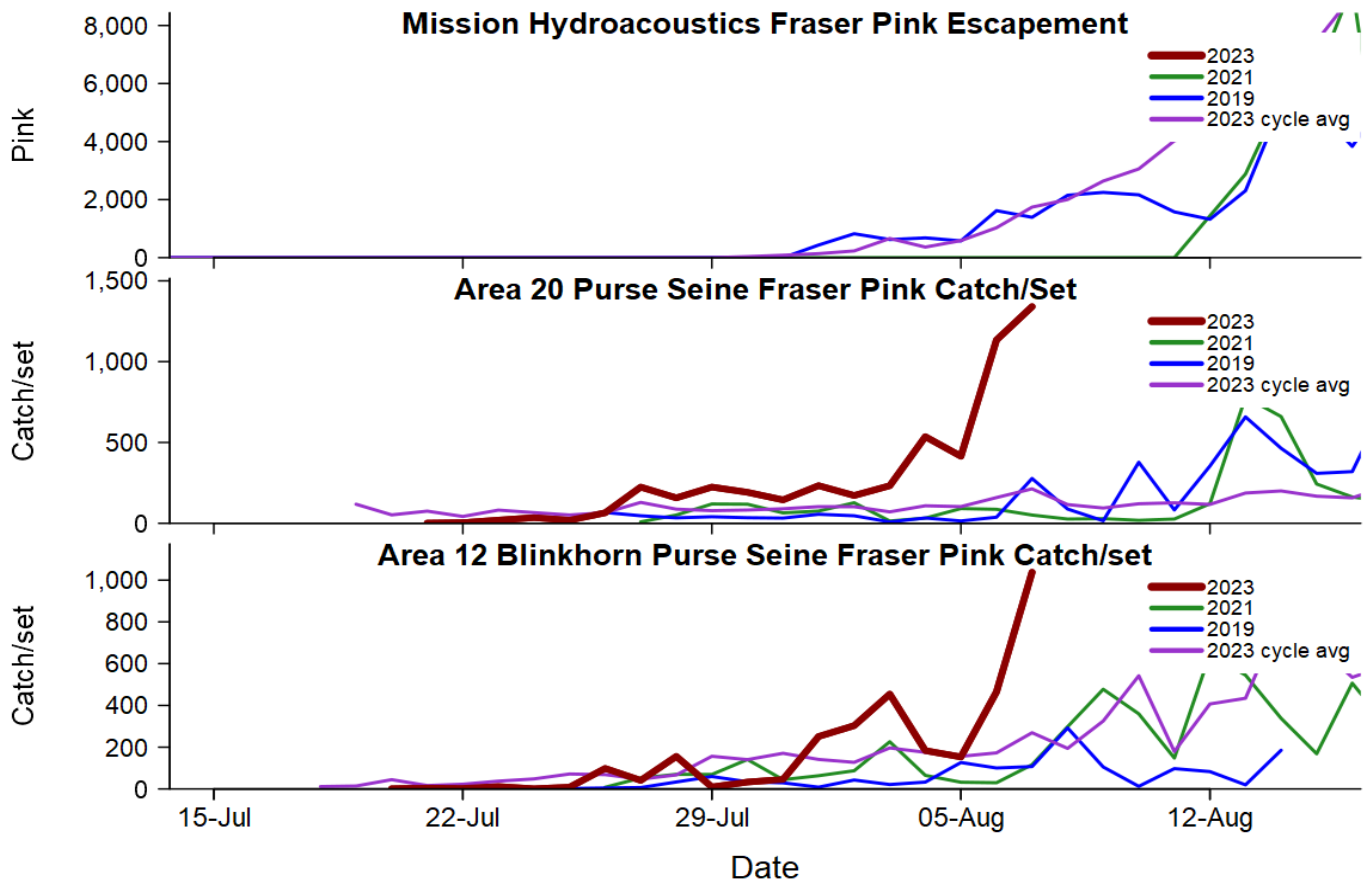
<sup>1</sup> Alternative Lower River Test Fishery - Southern Endowment Fund Project  
<sup>2</sup> Qualark escapement estimate - does not include Chilliwack, Pitt, Harrison, Birkenhead, Big Silver, Weaver, and Cultus  
<sup>3</sup> Qualark source:  
 RB + LB = Right-bank (RB) + Left-bank (LB)  
<sup>4</sup> Mission escapement estimate - does not include Pitt  
<sup>5</sup> Mission source:  
 A1+M+A2 = Left-bank ARIS (A1) + Mobile split-beam (M) + Right-bank ARIS (A2)  
 A1+M+A2 = Left-bank ARIS (A1) + Mobile ARIS (M2) + Right-bank ARIS (A2)  
<sup>6</sup> Daily Hells Gate abundance estimate; actual daily count has been expanded.  
 \*\* Three sets performed for Qualark Gillnet



2023 Fraser Pink Test Fishing & Escapement Summary

Area/Gear Location From A20	Johnstone Strait	Juan de Fuca Strait	Fraser River									
	A12 PS Blinkhorn (-1 day)	A20 PS Port Renfrew (0 days)	A29-13 GN Cottonwood (+5 days)	A29-17 GN Brownsville Bar <sup>1</sup>	A29-16 GN Whonnock (+6 days)	Whon CPUE Estimate (+6 days)	GN Catch (+8 days)	Qualark Estimate <sup>2</sup>	Method <sup>3</sup>	Mission Hydroacoustics Estimate <sup>4</sup> (+6 days)	Method <sup>5</sup>	Hell's Gate Estimates <sup>6</sup> (+10 days)
18-Jul				0	0	0.00	0**	0	RB+LB	0	S1+M+A2	0
19-Jul				0	0	0.00	0**	0	RB+LB	0	S1+M2+A2	0
20-Jul	302			0	0	0.00	0**	0	RB+LB	0	S1+M2+A2	0
21-Jul	931	128		0	0	0.00	0**	0	RB+LB	0	S1+M2+A2	0
22-Jul	549	410		0	0	0.00	0	0	RB+LB	0	S1+M2+A2	No Count
23-Jul	1,782	1344 (5 sets)		0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
24-Jul	69 (4 sets)	2,440		0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
25-Jul	927	1,150		0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
26-Jul	9,305	3,364	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
27-Jul	3,334	10,148	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
28-Jul	11,055	6,285	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
29-Jul	574	7,964	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
30-Jul	1,800	6,100	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
31-Jul	2,199	4,152	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
1-Aug	10,849	6,072	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
2-Aug	11,745	4,101	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
3-Aug	15,892	5,102	0	0	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
4-Aug	5,826	10,886	0	1	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
5-Aug	4,442	7,835	0	2	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
6-Aug	12,365	20,036	0	0	1	0.08	0	0	RB+LB	0	S1+M2+A2	0
7-Aug	25,449	22,255	0	1	0	0.00	0	0	RB+LB	0	S1+M2+A2	0
8-Aug												
9-Aug												

<sup>1</sup> Alternative Lower River Test Fishery - Southern Endowment Fund Project  
<sup>2</sup> Qualark escapement estimate - does not include Chilliwack, Pitt, Harrison, Birkenhead, Big Silver, Weaver, or Cultus  
<sup>3</sup> Qualark source:  
 RB+LB = Right Bank (RB) + Left Bank (LB)  
<sup>4</sup> Mission escapement estimate - does not include Pitt  
<sup>5</sup> Mission source:  
 S1+M+A2 = Left bank split-beam (S1) + Mobile split-beam (M) + Right bank ARIS (A2)  
 S1+M2+A2 = Left bank split-beam (S1) + Mobile ARIS (M2) + Right bank ARIS (A2)  
<sup>6</sup> Daily Hells Gate abundance estimate; actual daily count has been multiplied by 2.  
 \*\* Three sets performed for Qualark



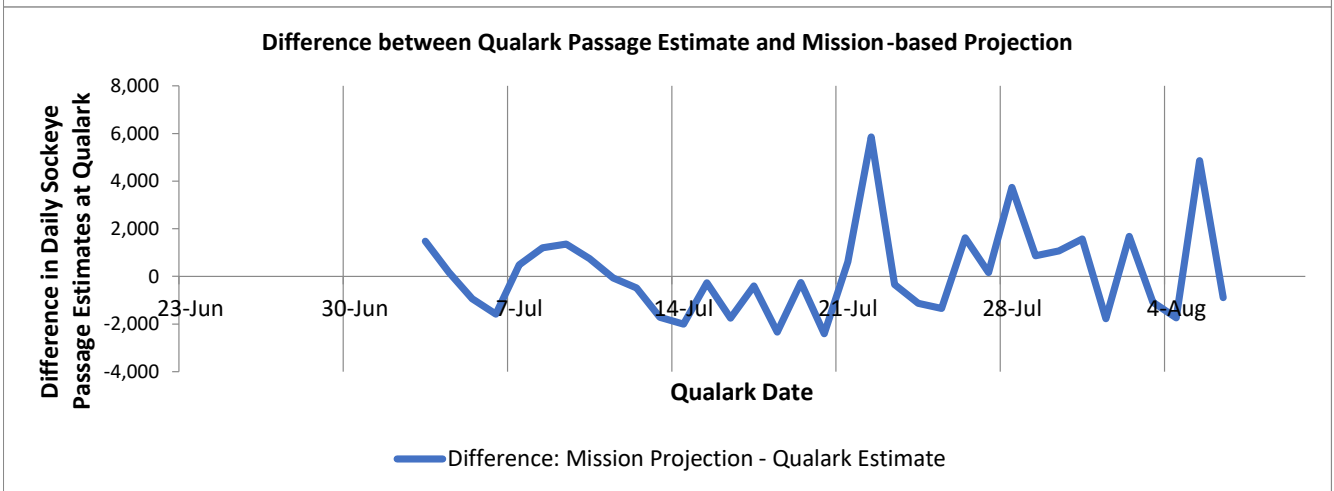
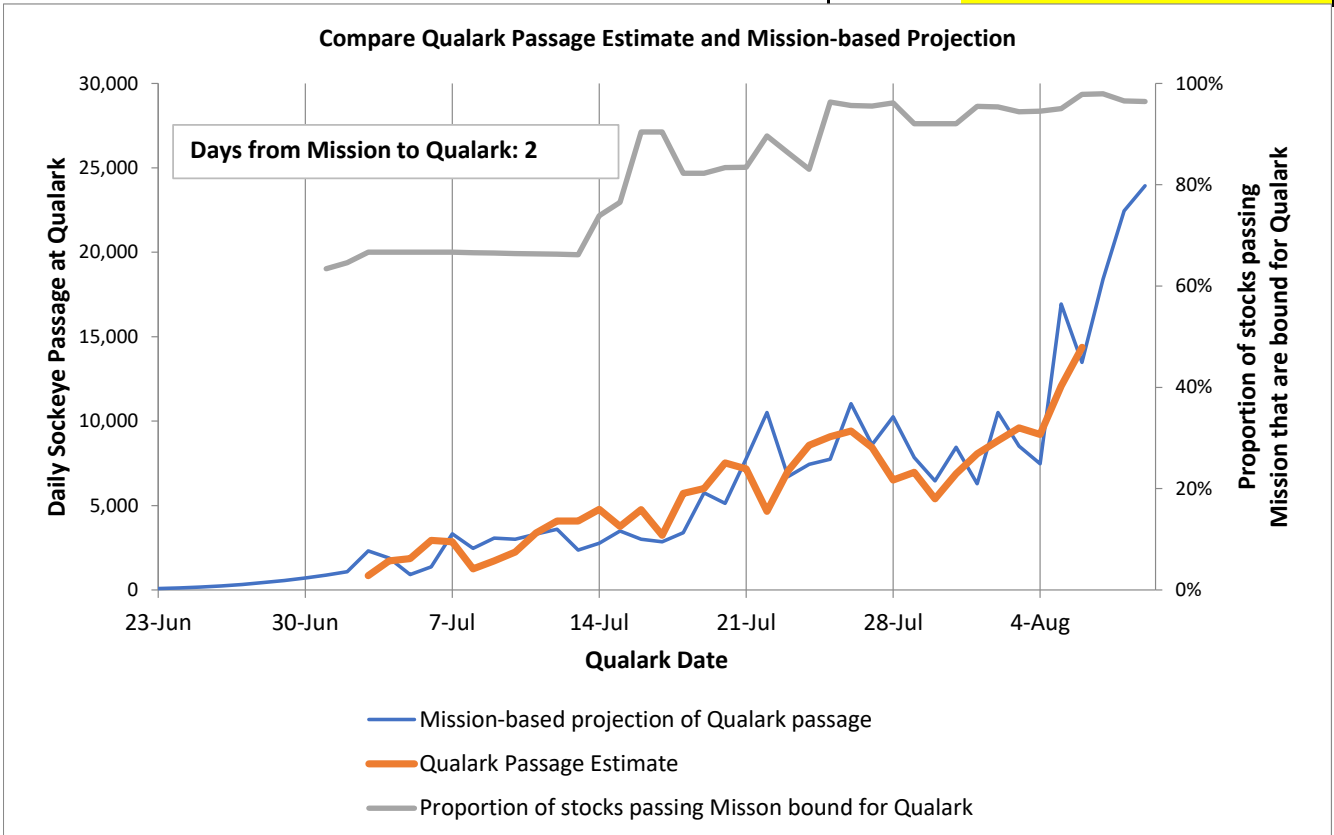
Fraser Sockeye: Qualark Passage Estimate and Mission-based Projection

Year: **2023**

Date: 8/Aug/23

Time: 9:27 AM

	All Days	Common Days
Mission projection	279,420	210,021
Qualark estimate	205,064	205,064
	<b>Difference</b>	<b>4,957</b>
	<b>%Difference</b>	<b>2%</b>



### 2023 Fraser River Sockeye Salmon Stock identification Review

Recent stock composition estimates for sockeye salmon

Fishing						Fraser-only Stock Proportions by Reporting Group <sup>4</sup> (%)														Age (%)			
						Sample		Early Stuart	Early Summer					Summer					Late				Overall Stocks
								Early Stuart	Chilli-wack	Pitt Alouette	Nadina Bowron	Gates Nahat-latch	Early Thompson	Early Summer sub-total	Harri-son	Late Stuart	Chilko Ques-nel	Raft North Thompson	Summer sub-total	Birken-head	Late Shuswap	Weaver Cultus	Late sub-total
Area/Gear <sup>1</sup>	Sector <sup>2</sup>	Date	Type <sup>3</sup>	Size (n)	%Fraser	Early Stuart	Chilli-wack	Coquit-lam	Nadina Bowron	Gates Nahat-latch	Early Thompson	Early Summer sub-total	Harri-son	Late Stuart	Chilko Ques-nel	Raft North Thompson	Summer sub-total	Birken-head	Late Shuswap	Weaver Cultus	Late sub-total	Age-4 <sub>2</sub>	
<b>Johnstone Strait &amp; Queen Charlotte Strait</b>																							
A12 ps	tf	Jul30-31	DNA	98	91%	0%	1%	2%	14%	2%	20%		40%	35%	1%	77%		1%	1%	1%	4%	53%	
A12 ps	tf	Aug 2	DNA	100	94%	0%		1%	5%	6%	12%		31%	43%	3%	77%		3%	4%	4%	11%	55%	
A12 ps	tf	Aug 5	DNA	91	97%	0%			11%	1%	12%		30%	52%		81%			2%	4%	6%	NA	
A12 ps	tf	Aug 6	DNA	94	93%	0%			7%	1%	7%		27%	47%	3%	77%		5%	2%	9%	15%	56%	
A12 ps		Aug 11	Prediction	1	97%	0%			6%	0%	6%		15%	56%	2%	73%		6%	3%	11%	21%	NA	
<b>Juan de Fuca Strait &amp; Washington &amp; Other</b>																							
A20 ps	tf	Jul 29	DNA	95	95%	0%	1%	8%	32%	9%	50%		4%	22%	20%	47%		1%		1%	2%	47%	
A20 ps	tf	Aug 1	DNA	96	96%	0%		1%	12%	6%	19%		3%	26%	45%	2%	76%			1%	5%	63%	
A20 ps	tf	Aug 4	DNA	99	96%	0%		4%	5%	3%	12%		4%	18%	53%		74%		9%	1%	4%	14%	
A20 ps	tf	Aug 5	DNA	99	98%	0%		4%	3%	5%	12%		10%	14%	42%	1%	66%		7%	1%	15%	22%	
A20 ps		Aug 10	Prediction	1	99%	0%		2%	2%	2%	5%		6%	18%	54%	1%	78%		6%	1%	10%	17%	
<b>In-river</b>																							
AB gn	tf	Aug3-4	DNA	33	100%	0%			26%	17%	43%			10%	41%		51%		6%		6%	NA	
AB gn	tf	Aug 5	DNA	52	100%	0%	2%		46%	10%	57%		2%	9%	32%		43%				0%	55%	
BB gn Bro	tf	Aug3-4	DNA	94	100%	0%		4%	31%	5%	40%			20%	37%	2%	60%				0%	NA	
BB gn Bro	tf	Aug5-6	DNA	99	100%	0%	1%	4%	19%	11%	35%			11%	51%	1%	63%		2%		2%	63%	

### 2023 Fraser River Pink Salmon Stock identification Review

Recent stock composition estimates for pink salmon

Fishing					DNA % Estimates by Group		
Sample		Canada					
		Fraser River	Washington	South Coast			
Area/Gear <sup>1</sup>	Sector <sup>2</sup>	Date	Type <sup>3</sup>	Size (n)	Fraser River	Washington	South Coast
<b>Johnstone Strait</b>							
A12 PS	TF	Jul31	DNA	95	12%	15%	73%
A12 PS	TF	Aug4	DNA	93	7%	24%	69%
A12		Aug12	Prediction	1	34%	25%	41%
<b>Juan de Fuca Strait</b>							
A20 PS	TF	Jul31	DNA	94	9%	30%	61%
A20 PS	TF	Aug3	DNA	93	26%	36%	38%
A20		Aug12	Prediction	1	47%	32%	21%
<b>Washington</b>							

**Notes for sockeye and pink tables:**

- <sup>1</sup> BB GN=29\_13 (Cottonwood,Brownsville), AT = Alaska Twist, AB GN= 29\_16 (Whonnock), MA FW=Matsqui Fish Wheel, QU GN=Qualark
- <sup>2</sup> TF=sample from test fishery catch, CM=sample from commercial catch, C&S=ceremonial & subsistence catch, FSC=food, social, & ceremonial catch, rec= recreational catch
- <sup>3</sup> 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
- <sup>4</sup> 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](http://www.psc.org/FRPWeb/Escapement/PSC_Fraser_Sockeye_Stock_Group_Definitions.pdf)

Results in grey text have been presented to the Panel previously

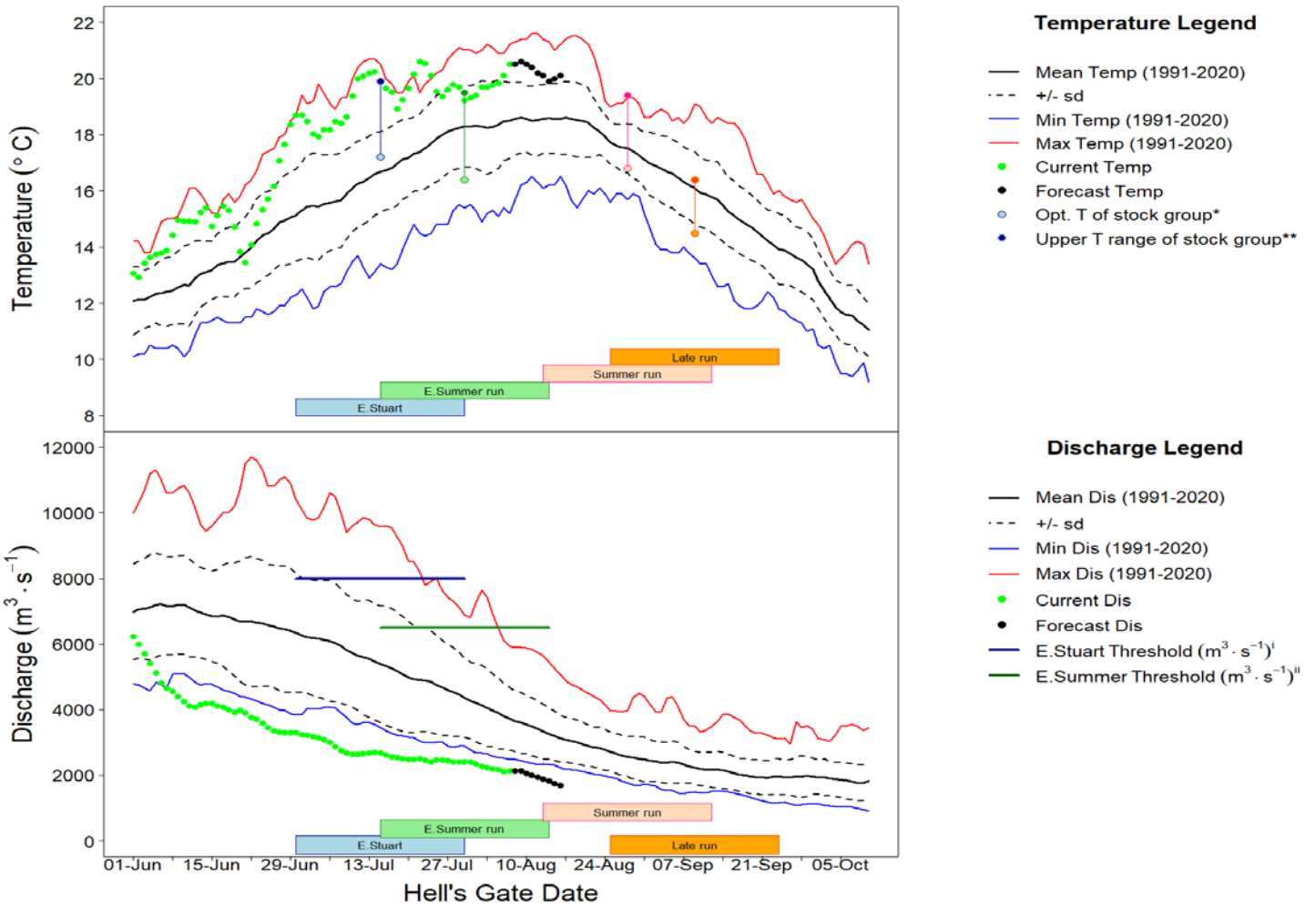
## Fraser River Environmental Report for August 07, 2023

<b>Observed Fraser River Temperature at Qualark for 07-Aug</b>	20.5°C
<b>Average (1991-2020) Historical Temperature on this day</b>	18.5°C
<b>Deviation from Average</b>	2°C
<b>Forecast Temperature for 13-Aug-23</b>	20.1°C

The forecast in Kamloops and Prince George is for above average air temperature until Aug 9 and 7, respectively. Air temperature is then forecast to drop to below average and then return to above average air temperature towards the end of the forecast.

<b>Observed Fraser River Discharge at Hope for 07-Aug</b>	2133 m <sup>3</sup> ·s <sup>-1</sup>
<b>Average (1991-2020) Historical Discharge on this day</b>	3722 m <sup>3</sup> ·s <sup>-1</sup>
<b>% above or below Historical Discharge</b>	-43%
<b>Forecast Discharge for 13-Aug-23</b>	1880 m <sup>3</sup> ·s <sup>-1</sup>

The forecast in Kamloops is for 3 mm precipitation. The forecast in Prince George is for 8 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.<sup>i</sup>pMA is the proportional increase to spawning escapement targets to help ensure targets are achieved.<sup>ii</sup>%DBE is %difference between estimates of potential spawning escapement and spawning escapement.\*This is the optimum temp for aerobic swimming - T<sub>opt</sub> (Eliason et al. (2011). Science 332: 109-112)\*\*This is the upper range of the optimum temp for aerobic swimming - T<sub>pejus</sub>.<sup>i</sup>Discharge threshold of 8000cms for Early Stuart from Macdonald (2000). Can. Tech. Rep. Fish. Aquat. Sci. 2315: 120p. <sup>ii</sup>Discharge 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.

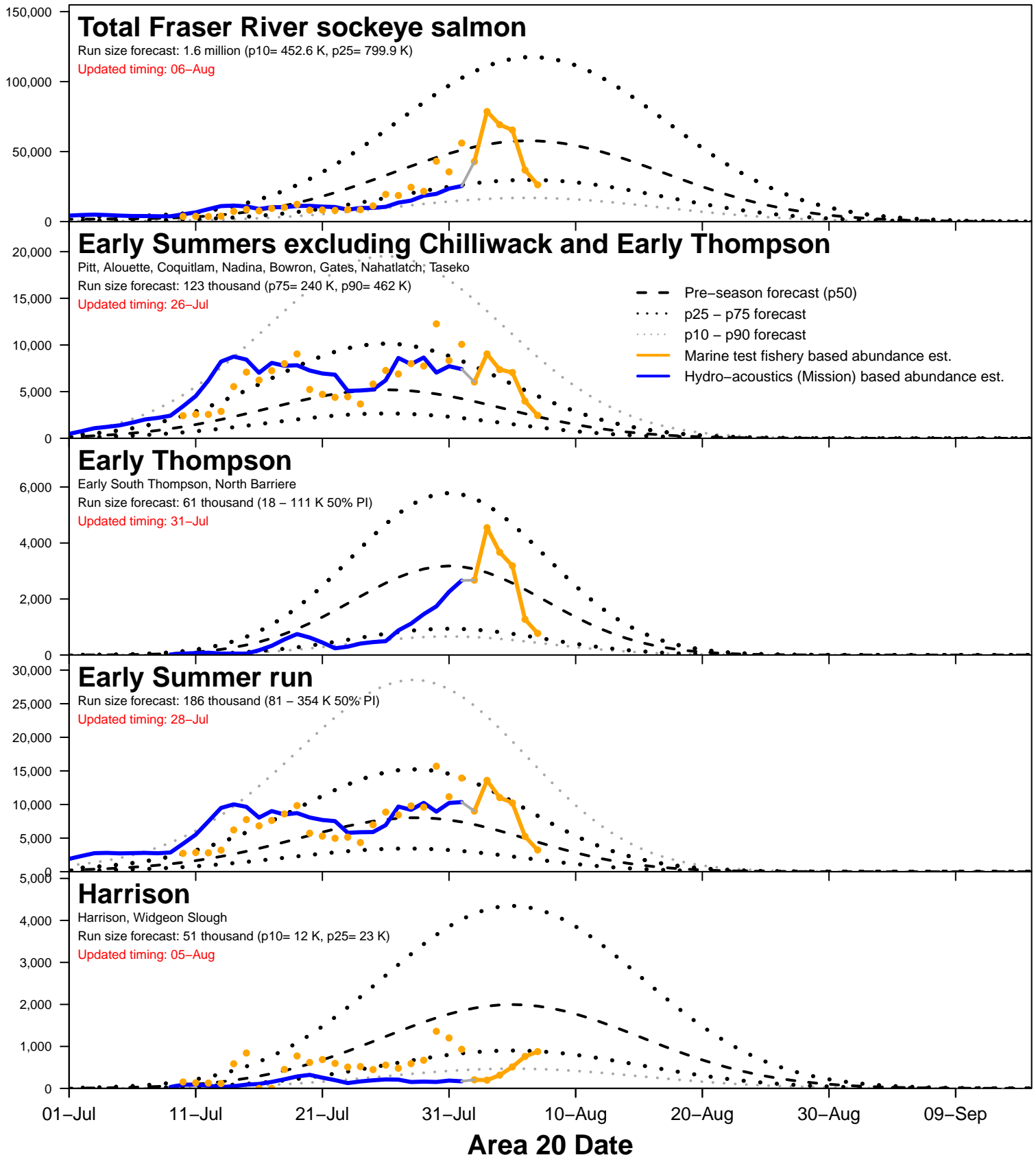


Current Temperatures						
Upriver of Slide	Map #	06-Aug	Daily Mean	Historic Mean	Deviation from Historical Mean	Historic Year Range
<b>Fraser River Mainstem</b>						
	1	Fraser River @ Qualark	20.1	18.5	1.6	1991-2020
	2	Fraser River @ Texas Creek	19.6	18.6	1.0	2006-2022
	3	Fraser River @ Big Bar Creek	NA	NA	NA	2019-2022
▶	4	Fraser River @ Marguerite	19.4	18.4	1.0	2015-2022
▶	5	Upper Fraser @ Shelley	18.3	15.4	2.9	1994-2022
<b>Fraser River Tributaries</b>						
	6	Thompson R. @ Ashcroft	20.3	18.1	2.2	1995-2022
	7	South Thompson @ Chase	20.5	19.3	1.2	1994-2022
	8	North Thompson @ McLure	19.0	15.6	3.4	2006-2022
▶	9	Quesnel R. @ Quesnel	18.0	17.1	0.9	2000-2022
▶	10	Nechako R. @ Isle Pierre	19.6	19.2	0.4	2006-2022
▶	11	Stuart R. @ Ft. St. James	20.8	18.7	2.1	2000-2022



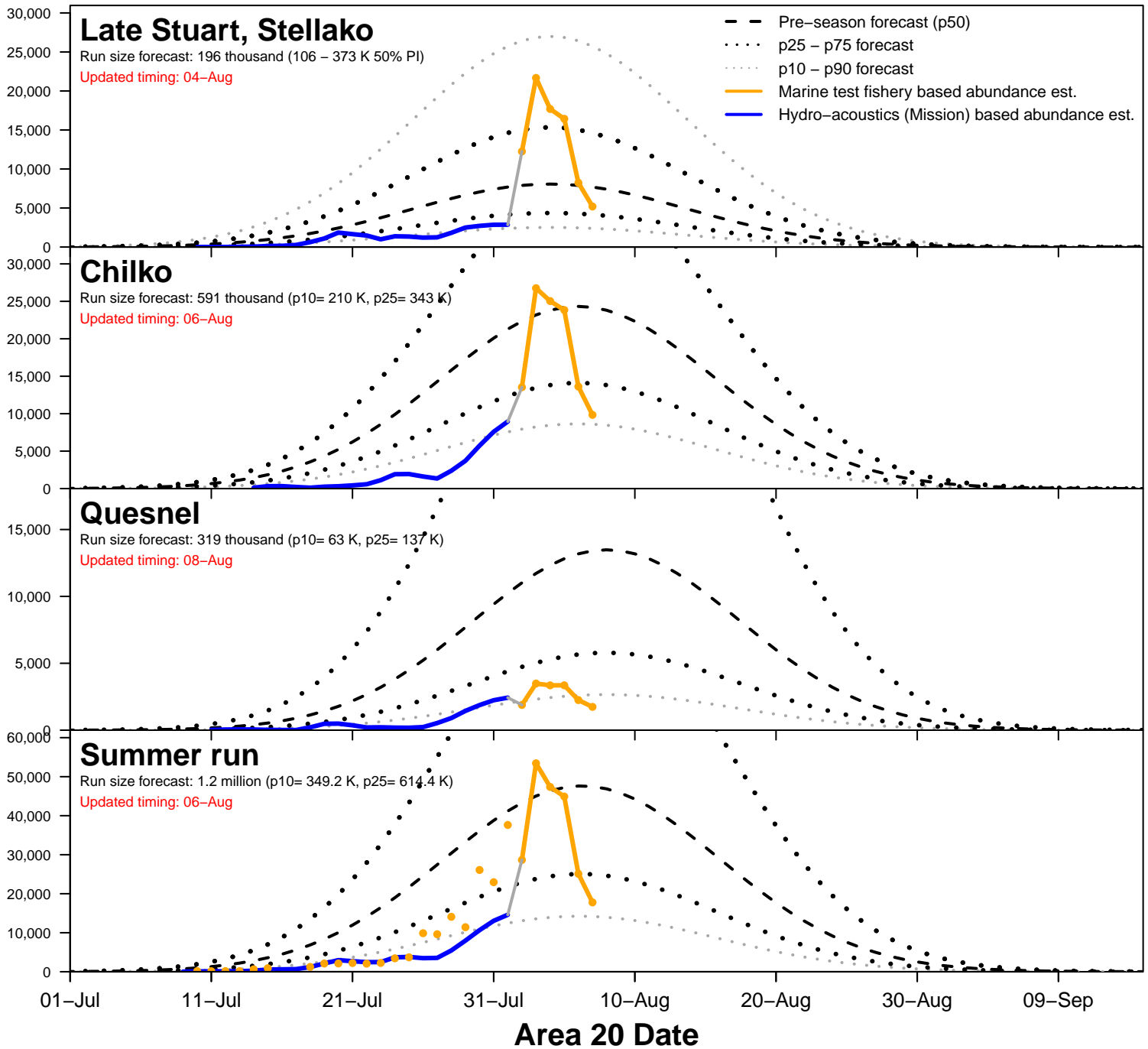
# 2023 Fraser River sockeye salmon daily migration

## Timing updated based on Timing Correlations



# 2023 Fraser River sockeye salmon daily migration

## Timing updated based on Timing Correlations



## 2023 Fraser River sockeye abundance en-route to Mission

Current date: 08-Aug

Area 20 date	Escapement past Mission through 07-Aug	Projected abundance en route to Mission based on marine test fishery data <sup>1,2</sup>								Escapement + projections through 13-Aug	
		02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	Total	80% Pi <sup>3</sup>		
		08-Aug	09-Aug	10-Aug	11-Aug	12-Aug	13-Aug		10p	90p	
<b>Total Fraser</b>	<b>341,300</b>	<b>82,600</b>	<b>29,200</b>	<b>112,100</b>	<b>54,400</b>	<b>18,400</b>	<b>30,600</b>	<b>327,300</b>	<b>192,800</b>	<b>507,500</b>	<b>668,600</b>
<b>Early Summer Run</b>	<b>217,100</b>	<b>17,900</b>	<b>5,000</b>	<b>18,900</b>	<b>9,300</b>	<b>2,500</b>	<b>3,900</b>	<b>57,500</b>	<b>28,200</b>	<b>119,000</b>	<b>274,600</b>
Chilliwack	30,700	600	0	0	0	0	0	600	300	1,200	31,300
Pitt/Alouette/Coquitlam	25,700	1,900	600	1,500	600	600	700	5,900	2,900	12,200	31,600
Nadina group <sup>4</sup>	145,700	10,700	2,100	10,800	6,400	1,200	2,300	33,500	16,400	69,300	179,200
Early Thompson <sup>5</sup>	15,000	4,700	2,300	6,600	2,300	700	900	17,500	8,600	36,200	32,500
<b>Summer Run</b>	<b>81,400</b>	<b>57,800</b>	<b>20,600</b>	<b>81,400</b>	<b>39,700</b>	<b>13,300</b>	<b>22,000</b>	<b>234,800</b>	<b>143,200</b>	<b>338,100</b>	<b>316,200</b>
Harrison / Widgeon <sup>2</sup>	3,600	200	200	200	500	800	1,000	2,900	1,800	4,200	6,500
Late Stuart / Stellako	25,600	26,200	7,800	30,900	14,300	4,000	6,300	89,500	54,600	128,900	115,100
Chilko	38,600	26,200	10,800	43,000	21,100	7,200	12,300	120,600	73,600	173,700	159,200
Quesnel	12,000	3,700	1,200	5,500	3,300	1,200	2,200	17,100	10,400	24,600	29,100
Raft / North Thompson	1,600	1,500	600	1,800	500	100	200	4,700	2,900	6,800	6,300
<b>Late Run</b>	<b>2,000</b>	<b>6,900</b>	<b>3,600</b>	<b>11,800</b>	<b>5,400</b>	<b>2,600</b>	<b>4,700</b>	<b>35,000</b>	<b>21,400</b>	<b>50,400</b>	<b>37,000</b>
Birkenhead / Big Silver	1,600	2,800	1,600	4,000	1,300	1,100	2,000	12,800	7,800	18,400	14,400
Late run excl Birkenhead	400	4,100	2,000	7,800	4,100	1,500	2,700	22,200	13,500	32,000	22,600

<sup>1</sup> En route catches are incomplete: catches from present and future fisheries must be deducted from projections and added to the catches removed

<sup>2</sup> Projected abundances en route to Mission include Harrison and Late runs, an uncertain number of which are expected to delay

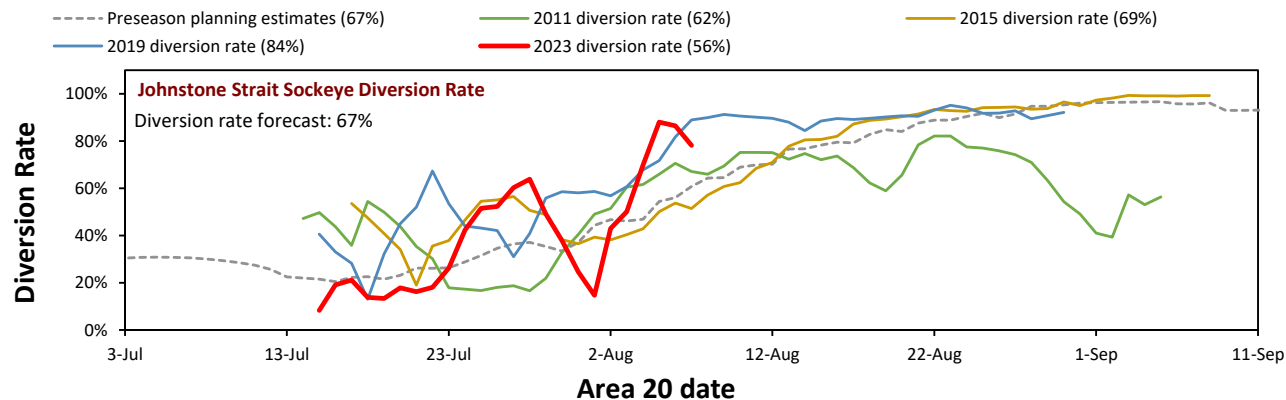
<sup>3</sup> 80% Probability Interval: there exists an 80% chance that the true abundance lies within this interval

<sup>4</sup> Nadina / Bowron / Gates / Nahatlatch / Taseko

<sup>5</sup> Early South Thompson / North Barriere

## 2023 Fraser River sockeye diversion rates through Johnstone Strait

5-day-average	
<b>Diversion rate</b>	<b>78%</b>



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 <sup>1</sup>					
	Inseason Adopted	Preseason Forecast	Inseason estimate	Inseason 80% PIs <sup>2</sup>		Method	Catch + Escapement	6-day Projection <sup>3</sup>	Seaward Abundance	Migration Delay	Inseason Adopted	Preseason Forecast	Inseason estimate	Inseason 80% PIs <sup>2</sup>		Method
				10% PI	90% PI									10% PI	90% PI	
<b>Early Stuart Run</b>	<b>43,000</b>	<b>23,000</b>	✓ <b>41,000</b>	<b>41,000</b>	<b>41,000</b>	<b>Recon</b>	<b>41,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>02-Jul</b>	<b>07-Jul</b>	<b>02-Jul</b>	<b>02-Jul</b>	<b>02-Jul</b>	<b>Recon</b>
<b>Early Summer Run</b>	<b>240,000</b>	<b>186,000</b>	● <b>268,000</b>	<b>239,000</b>	<b>306,000</b>	<b>Sum</b>	<b>221,000</b>	<b>29,000</b>	<b>18,000</b>	<b>0</b>	<b>20-Jul</b>	<b>06-Aug</b>	<b>22-Jul</b>	<b>20-Jul</b>	<b>24-Jul</b>	<b>Weight</b>
Chilliwack		2,000	✓ 32,000	31,000	32,000	Recon	31,000	1,000	0	0		20-Jul	05-Jul	05-Jul	05-Jul	Recon
Pitt/Nadina Group <sup>4</sup>		123,000	● 200,000	183,000	219,000	Recon(2)	174,000	17,000	9,000	0		05-Aug	22-Jul	21-Jul	23-Jul	Recon(2)
Early Thompson <sup>5</sup>		61,000	◇ 36,000	25,000	55,000	Model	16,000	11,000	9,000	0		09-Aug	03-Aug	01-Aug	06-Aug	Model
<b>Summer Run</b>	<b>NA</b>	<b>1,167,000</b>					<b>84,000</b>	<b>237,000</b>		<b>6,000</b>	<b>NA</b>	<b>17-Aug</b>	<b>06-Aug</b>	<b>03-Aug</b>	<b>17-Aug</b>	<b>Timing Corr.</b>
Harrison / Widgeon		51,000					4,000	5,000		6,000		12-Aug	05-Aug			Timing Corr.
Late Stuart / Stellako		196,000					27,000	89,000		0		13-Aug	04-Aug			Timing Corr.
Chilko		591,000					40,000	121,000		0		17-Aug	06-Aug			Timing Corr.
Quesnel		319,000					12,000	17,000		0		19-Aug	08-Aug			Timing Corr.
Raft / North Thompson		10,000					2,000	5,000		0		23-Aug	16-Aug			Timing Corr.

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

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

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

<sup>4</sup> Pitt / Alouette / Coquitlam / Nadina / Bowron / Gates / Nahatlatch / Taseko

<sup>5</sup> 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
Sum	Sum of individual groups
Weight	Weighted average of individual groups

**Run Size Uncertainty Legend<sup>†</sup>**

- ✓ ≥ 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 for 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 indication of run size; ≥ 50% confirmed at Mission
- ◇ < 50% of the run size has been accounted for in catch + escapement. Uncertain or early indication of run size based on marine data

<sup>†</sup> 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.

**Early Thompson run size based on timing**

**Catch+Escapement To Date: 15,000**  
**6-day projections: 17,000**

	Method	Run Size*	% Seaward of Mission
Based on timing of 01-Aug	50% Date	31,000	52%
Based on timing of 03-Aug	50% Date	45,000	67%
Based on timing of 07-Aug	50% Date	65,000	77%
Based on timing of 10-Aug	% Seaward	82,000	82%
Based on timing of 13-Aug	% Seaward	115,000	87%

\*Based on % seaward in 2011, 2015 and 2019 if timing is later than 07-Aug

\*Equal to double the reconstructed abundance if timing is earlier than 08-Aug

**Early Summer run size based on timing**

**Catch+Escapement To Date: 220,000**  
**6-day Projection: 29,000**

	Method	Run Size*	% Seaward
Based on timing of 22-Jul	50% Date	272,000	19%
Based on timing of 23-Jul	50% Date	288,000	24%
Based on timing of 24-Jul	50% Date	295,000	25%
Based on timing of 25-Jul	50% Date	308,000	29%
Based on timing of 26-Jul	50% Date	323,000	32%

\*Based on % seaward in 2011, 2015 and 2019 if timing is later than 07-Aug

\*Equal to double the reconstructed abundance if timing is earlier than 08-Aug

