



PACIFIC SALMON COMMISSION

ESTABLISHED BY TREATY BETWEEN CANADA
AND THE UNITED STATES OF AMERICA
MARCH 18, 1985

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No. 6

WEEKLY REPORT

August 19, 2016

The Fraser River Panel met today to review assessment data on Fraser River sockeye salmon. Marine area purse seine test fisheries along both migration routes were terminated August 12. Daily in-river test fisheries will continue as will the Mission hydroacoustics program. The current estimated total sockeye escapement into the Fraser River past Mission to date is 658,800. Over the past week, the observer at Hells Gate reported a steady migration of sockeye.

Run Status

At today's meeting the Panel decreased the estimated run size for the Early Summer-run from 250,000 to 240,000 with July 20 timing, which is one day earlier than previous. The Panel also reduced the Summer-run run-size estimate from 600,000 to 520,000 with July 30 timing, which is also one day earlier than previous. To date, the Late-run also appears to be earlier and smaller than expected. The Panel decreased the Late-run run-size from its median pre-season forecast of 111,000 to 75,000 and updated the estimated median timing thru marine areas to August 08. The current in-season total run sizes for Early Stuart, Early Summer-run, Summer-run and Late-run are 18,000, 240,000, 520,000, and 75,000, respectively. The sum of these estimates results in a total Fraser sockeye run for the season of 853,000 fish. This is the lowest run-size ever estimated since estimates began in 1893. Returns on the 2016 cycle are typically the lowest of the four-year cycle (average returns 1952, 1956..., 2008, 2012; 3,650,000 fish). Most Fraser sockeye populations are forecast based on spawning escapements in prior brood years (2012 for age 4 fish and 2011 for age 5 fish), and based mostly on the numbers of fish spawning in 2012, the median forecast was expected to be below average for the cycle; 2,271,000 fish. The exact reasons why the return fell at the lower end of the forecast range are unknown at this time, but poorer than average marine survival is a leading candidate. Almost half of the total 2016 return was expected to be contributed by the Chilko River and Lake populations. But current in-season estimates of Chilko returns would project a smolt to age 4 survival of less than 2%, or less than one third of the long-term average (1953- present). Small changes to accounted total sockeye run size estimates for each timing group may occur following the completion of their upstream migration.

Upstream Escapement

The estimated escapements of Early Stuart, Early Summer-run, Summer-run and Late-run past Mission are 17,900, 221,900, 382,400 and 36,600, respectively. Relatively small additional Mission escapements of Summer and Late-run sockeye are anticipated to occur as their upstream migration continues until the end of August and early September.

Environmental Update

On August 18, the Fraser River water discharge at Hope was about 2,706 cms, which is approximately 15% lower than average for this date. The temperature of the Fraser River at Qualark on August 18 was 20.6°C, which is 2.5°C higher than average for this date. DFO's Environmental Watch program projects that river temperature will decrease slightly but still remain at levels near daily historic maximums for the time of year, and the discharge is forecast to decrease to below 2,409 cms by the end of the 10 days forecast period. Observations of fish condition suggest that river conditions are not having a significant

impact on sockeye migration in most areas of the watershed at this time, but water temperatures have increased and this may impact the condition of fish observed in the coming days.

The Panel has been monitoring river conditions and their implications for the expected difference between estimates (DBE) for all management groups since the beginning of the management season to determine whether management adjustments (MA) were required to compensate for expected differences. Management adjustments are enacted in order to improve the chance of reaching the spawning escapement goal for the aggregate. Due to the current run sizes for all management groups being at levels which result in the application of the low abundance exploitation rate (LAER) no management adjustments are required. The application of a LAER has the effect of limiting the exploitation rate to a small amount (e.g. 10% or 20% of a run timing group)

Spawning Escapement Update

A number of spawning escapement assessment programs have begun. The following summarizes DFO's fourth weekly report. The Early Stuart run is past peak of spawn in several creeks and the spawning success is lower than expected at this stage. Several assessment programs are now in place for the Early Summer-run. At Scotch Creek no sockeye have passed through the assessment weir to date, and the water levels are lower than average. The Upper Chilliwack River hydroacoustics program has observed steady migration into the river and it now reports a total of 48,081 sockeye have passed the sonar site as of August 16. Sockeye are reported to be in the early stages of peak of spawn and are in good condition. The survey program at Chilliwack Lake started August 17 and on this first survey 29 carcasses were recovered. The Gates Creek spawning channel has been operational since August 6. Sockeye have not loaded into the channel, but 180 sockeye have been counted into the creek upstream of the channel to date. The Nadina River Channel has been operational since August 15 and 1,777 sockeye have been counted into the channel. The operator has reported that an additional 1,500 sockeye are holding in front of the channel entrance. The sockeye have been reported to be in good condition. For the Summer-run, the Chilko hydroacoustic site has reported 4,000 fish past the sonar site as of August 16, and the sockeye are reported to be in good condition. For the Late-run, the counting fence at Sweltzer Creek has reported 377 sockeye have passed the fence through August 17. The water temperature is 23.0°C.

Regulatory Announcements & Resources

The Panel announced the following regulations for commercial salmon fisheries in Panel Area waters:

CANADIAN FRASER RIVER PANEL AREA WATERS:

Remain closed to commercial salmon fishing.

UNITED STATES FRASER RIVER PANEL AREA WATERS:

Remain closed to commercial salmon fishing.

The Panel will be updated over the next two weeks on run status and catch updates. This is the last in-season Weekly Report for the 2016 season. Weekly reports and regulatory announcements can be obtained via http://www.psc.org/news_frpnews.htm or by subscribing to our eNews <http://tinyurl.com/PSCeNews>. Regulations and resources for fishing schedules, test fishing catch and DFO's environmental watch program can be found in Table 1.

Table 1. Regulations & Resources

Fishing Schedule Contacts/Resources	Phone Number/ Website Links
United States fishing schedules (Treaty Indian)	1-800-562-6142
United States fishing schedules (Non-Indian)	1-800-662-9825
Canadian commercial fishing regulations (from the lower B.C. mainland)	604-666-2828
Canadian commercial fishing regulations (from outside the lower B.C. mainland)	1-866-431-3474
PSC Daily Test Fishing Catch (recorded message)	604-666-8200 http://www.psc.org/info_testfishing.htm .
DFO's Environmental Watch program	http://www.pac.dfo-mpo.gc.ca/science/habitat/frw-rfo/index-eng.html

Note: For species other than sockeye salmon consult the appropriate regulatory agency regarding fisheries regulations in the Fraser River Panel Management Area.

Contacts

United States: Kirt Hughes, Chair, Fraser River Panel

Canada: Jennifer Nener, Vice-chair, Fraser River Panel

2016 Run status of Fraser sockeye

Date: Aug. 19, 2016

Week of: Aug. 14 - Aug. 20, 2016	Sockeye					Total Fraser
	Management Group					
	E.Stuart	E.Summer	Summer	Late		
Mission passage (includes Pitt, Alouette, Coquitlam)	17,900	221,900	382,400	36,600	658,800	
Catch downstream of Mission	100	11,500	49,400	5,300	66,300	
Accounted run-to-date	18,000	233,400	431,800	41,900	725,100	
Run size adopted in-season¹	18,000	240,000	520,000	75,000	853,000	
Run size forecasted pre-season	36,000	447,000	1,677,000	111,000	2,271,000	
Area 20 timing adopted in-season	3/Jul	20/Jul	30/Jul	8/Aug	27/Jul	
Area 20 timing expected pre-season	3/Jul	21/Jul	6/Aug	14/Aug		

¹ 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.

2016 Catch-to-date by fishery

Date: Aug. 19, 2016

Week of: Aug. 14 - Aug. 20, 2016		Sockeye	
		Total	Fraser
Canada		121,100	120,500
Commercial		0	0
	B Purse Seine	0	0
	D Gillnet	0	0
	E Gillnet	0	0
	F Troll	0	0
	G Troll	0	0
	H Troll	0	0
First Nations		120,400	119,800
	Food, Social & Ceremonial (FSC)	120,400	119,800
	Marine	31,400	30,800
	Fraser R.	89,000	89,000
	Economic Opportunity (EO) & Demonstration (Demo)	0	0
	Marine	0	0
	Fraser R.	0	0
Recreational		0	0
	Marine	0	0
	Fraser R. *	0	0
Charter (Albion gillnet test fishery)		700	700
United States		1,800	1,700
Commercial		900	800
	Treaty Indian (TI)	900	800
	All Citizen (AC)	0	0
Treaty Indian Ceremonial & Subsistence (C&S)		900	800
All Citizen Recreational		0	0
Alaska *		na	na
Panel-approved Test Fisheries		9,100	8,500
Panel Waters		6,500	6,100
Non-Panel Waters		2,700	2,400
Total		132,000	130,600

* Recent LFA Recreational catches may be projected based on a scalar applied to Mission Escapement.

** Alaska catch is processed post-season and so is unavailable in-season.