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No. 6

WEEKLY REPORT

August 16, 2019

The Fraser River Panel (Panel) met today to review assessment data on Fraser River sockeye and pink salmon. The current in-season total run sizes for Early Stuart, Early Summer-run, Summer-run and Late-run are 27,000, 85,000, 224,000, and 111,000, respectively. As of today, the sum of these estimates results in a total Fraser sockeye run of 447,000 fish. This is the lowest run-size ever estimated since estimates began in 1893, and lower than the previous record for lowest run size of 858,000 observed in 2016.

The landslide at Big Bar continues to be a major source of concern for the Panel as migrating sockeye salmon will need to pass this area to reach their spawning grounds. It is estimated that about 76,000 sockeye will have reached the Big Bar site as of August 15 based on abundances observed at Mission and 15,974 salmon (11,881 sockeye and 4,093 Chinook salmon) have been transported upstream from the slide via helicopter. As of August 15, a total of 125 sockeye have been radio tagged to monitor their upstream movement. To evaluate the success of upstream relocation efforts, 44 radio tagged sockeye have been transported by helicopter of which 52% successfully resumed their upstream migration. Efforts to create a natural fish passage on the edge of the river continue through the manipulation of large boulders aided by small scale-controlled detonations. Excluding the salmon transported by helicopter, none of the radio tagged salmon released below the slide have been detected above the Big Bar slide thus far and the landslide area currently presents a total impediment to natural fish passage. For further information on the landslide please see the web link in Table 1 at the end of this report.

Run Status

The migration of sockeye through both marine and Fraser River assessment areas has been very low to date, as indicated by the low sockeye catches in all areas. All sockeye management groups are now being managed using low abundance exploitation rates (LAER); 10% for Early Stuart and 20% for the other management groups. As a result, there will be no sockeye salmon directed fisheries this season. The LAERs for all sockeye management groups however allow by-catch of sockeye in fisheries directed at other species with available surpluses (e.g. pink salmon). Pink salmon catches in marine area purse seine test fisheries have increased over the last week and for Area 20 are above the cycle average.

DNA analysis of a sockeye catch sample recently collected from the Area 12 purse seine test fishery indicated Fraser sockeye contributions of approximately 10% Early Summer run, 82% Summer run and 7% Late run. These stock proportions indicate a transition to predominantly Summer-run stocks within the catch samples. Analyses of recent pink salmon DNA samples collected from the Area 20 test fishery indicate that 68% of the pink salmon encountered are of Fraser River origin, 21% are from Puget Sound, and 12 % are from South Coast stocks. These Fraser River pink proportions are high in comparison to previous years and highlight the relative strength of Fraser pink returns in comparison to other pink stocks.

The estimated diversion rate of sockeye salmon through Johnstone Strait remains high at 86%; this is similar to the pre-season plan. Diversion rate of Fraser pink salmon is 7%, based on recent purse seine test fishery catches in the two approach areas; well below the pre-season plan.

Management Groups

Fraser River Sockeye Salmon

The estimated escapement of Early Summer-run sockeye past Mission through August 15 is 71,600 fish. All of the Early Summer-run groups have been represented in the catch samples from marine test fisheries. The Early Summer run group is currently tracking below the p10 forecast of 112,000, which is the currently adopted run size. During the Panel meeting today the decision was made to reduce the Early Summer-run run size to 85,000 with an associated Area 20 timing of July 26.

For Summer-run sockeye, abundances have been increasing in the marine test fisheries. At this point, the Summer run is tracking well below the p10 forecast of 1.6 million sockeye. The presence of the Chilko stock group, which was expected to contribute more than half of the total Fraser sockeye return this year has increased in catch samples but associated abundances remain low. At the Panel meeting on Tuesday August 13, the Panel reduced the Summer-run run size to 1,065,000 with a 50% marine timing in Area 20 of August 25. During the Panel meeting today the decision was made to reduce the Summer-run run size to 224,000 with an associated Area 20 timing of August 17. Thus far, only a total of 71,500 Summer-run sockeye have been detected past Mission.

To date, 3,500 Late-run sockeye have been estimated to have migrated past Mission. The current data are insufficient to generate credible in-season estimates of run-size for the Late-run aggregate; however, Birkenhead which comprise 64% of the Late run stock are returning in very small numbers to date. There is no evidence of Late-run delay to date. During the Panel meeting today the decision was made to reduce the Late-run run size to 111,000 (pre-season p10 forecast level) with an associated Area 20 timing of August 25.

Fraser River Pink Salmon

Current Fraser River pink salmon abundance data are insufficient to generate a reliable in-season estimate of the total return at this time. The estimated escapement of pink salmon past Mission through August 15 is 28,000.

Environmental Update

On August 15, the Fraser River water discharge at Hope was about 3,237 cms, which is approximately 4% lower than average for this date. The temperature of the Fraser River at Qualark on August 15 was 19.2°C, which is 1.2°C higher than average for this date. DFO's Environmental Watch program projects that river temperature will decrease slightly to 18.9°C and discharge to also decrease to 2,980 cms over the next 10 days.

Escapement Update

DFO reports that the Early Stuart spawning escapement assessment program has begun. Cyclic visual surveys began July 24, and a few sockeye have been observed.

For the Early Summer run, a fence at Scotch Creek has been operational since August 6, no fish have passed through the fence to date, but sockeye are reported to be holding downstream of the fence. Visual surveys started August 6 on the Lower Fraser. It has been reported that sockeye are holding in the Upper Chilliwack River and there are some early indications of spawning activity starting. A hydroacoustic site has been operational on the Stellako River since August 1 and no sockeye have been counted past the site as of August 13. No sockeye have been counted into the Gates Creek spawning channel to date.

For the Summer run, hydroacoustic sites have been operational on the Chilko River and Quesnel River since August 9 and 12, respectively. No sockeye have been counted past either site.

For Late run, the counting fence at Sweltzer Creek has been operational since July 30 and no sockeye have been counted

through the fence as of August 14.

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 next in-season meeting of the Panel is scheduled to occur on August 20. Weekly reports in this series will be provided by the Panel through the Commission every Friday during the in-season management period to inform those interested in the progress of the Fraser River sockeye salmon run. Weekly reports and regulatory announcements can be obtained via <http://www.psc.org/publications/fraser-panel-in-season-information> or by subscribing to our eNews <http://tinyurl.com/PSCeNews>. Regulations and resources for fishing schedules, test fishing catch, DFO's environmental watch program as well as information on the Big Bar landslide 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
Big Bar Landslide Incident	https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/emergency-response-and-recovery/incident-summaries/big-bar-landslide-incident .

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

Contacts

Canada: Jennifer Nener, Chair, Fraser River Panel

United States: Lorraine Loomis, Vice-chair, Fraser River Panel

2019 Run status of Fraser sockeye and pink salmon

Date: Aug. 16, 2019

Week of: Aug. 11 - Aug. 17, 2019	Sockeye				Pink	
	Management Group				Total	Total
	E.Stuart	E.Summer	Summer	Late	Fraser	Fraser
Mission passage (includes Pitt, Alouette, Coquitlam) ¹	25,900	71,600	71,500	3,500	172,500	28,000
Catch downstream of Mission	0	800	2,400	100	3,300	1,200
Accounted run-to-date	25,900	72,400	73,900	3,600	175,800	29,200
Run size adopted in-season ²	27,000	85,000	224,000	111,000	447,000	na
Run size forecasted pre-season	41,000	465,000	3,930,000	359,000	4,795,000	5,018,600
Area 20 timing adopted in-season	8/Jul	26/Jul	17/Aug	25/Aug		na
Area 20 timing expected pre-season	5/Jul	30/Jul	10/Aug	18/Aug		28/Aug

¹ Mission passage includes 1700 Early Stuart run assumed to have migrated past Mission prior to the start of the Whonnock test fishery.

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.

2019 Catch-to-date by fishery

Date: Aug. 16, 2019

Week of: Aug. 11 - Aug. 17, 2019		Sockeye		Pink	
		Total	Fraser	Total	Fraser
Canada		360	360	1,080	390
	Commercial	0	0	0	0
	B Purse Seine	0	0	0	0
	D Gillnet	0	0	0	0
	E Gillnet	0	0	0	0
	F Troll	0	0	0	0
	G Troll	0	0	0	0
	H Troll	0	0	0	0
	First Nations	340	330	1,080	380
	Food, Social & Ceremonial (FSC)	340	330	1,080	380
	Marine	0	0	1,050	360
	Fraser R.	330	330	20	0
	Economic Opportunity (EO) & Demonstration (Demo)	0	0	0	0
	Marine	0	0	0	0
	Fraser R.	0	0	0	0
	Recreational	0	0	0	0
	Marine	0	0	0	0
	Fraser R.	0	0	0	0
	Charter (Albion gillnet test fishery)	20	20	0	0
United States		0	0	0	0
	Commercial	0	0	0	0
	Treaty Indian (TI)	0	0	0	0
	All Citizen (AC)	0	0	0	0
	Treaty Indian Ceremonial & Subsistence (C&S)	0	0	0	0
	All Citizen Recreational	0	0	0	0
	Alaska *	na	na	na	na
Panel-approved Test Fisheries		3,850	3,540	2,640	800
	Panel Waters	1,040	990	1,450	490
	Non-Panel Waters	2,810	2,550	1,180	310
Total		4,210	3,890	3,720	1,190

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