

Fraser River Sockeye In-season Update – Tuesday, August 4, 2020

The below is a summary. If more specific details are required please refer to the attached Fraser Panel distribution for the call. If you have any questions or notice any errors in the summary please contact me jamie.scroggie@dfo-mpo.gc.ca so I can make adjustments.

Total In-season Catch and Escapement Accounted To-date

2020 Run status of Fraser sockeye salmon

Date: Aug. 4, 2020

| Week of: Aug. 2 - Aug. 8, 2020 | Sockeye | | | | |
|---|------------------------------------|-----------|-----------|-----------|--------------|
| | Management Group | | | | Total Fraser |
| | E.Stuart | E.Summer | Summer | Late | |
| Mission passage (incls Pitt, Alouette, Coquitlam) | 13,300 | 51,800 | 55,800 | 1,900 | 122,800 |
| Catch downstream of Mission | 100 | 1,100 | 2,200 | 100 | 3,500 |
| Accounted Run To Date | 13,400 | 52,900 | 58,000 | 2,000 | 126,300 |
| Run size adopted in-season ¹ | 14,000 | na | na | na | na |
| Run size forecasted pre-season | 13,000 | 218,000 | 611,000 | 99,000 | 941,000 |
| Area 20 timing adopted in-season | 7/Jul | na | na | na | na |
| Area 20 timing expected pre-season | 4/Jul | 24/Jul | 31/Jul | 6/Aug | 30/Jul |
| Johnstone Str. Diversion Rate | In-season 5-day average | | | | 34% |
| | Preseason forecast of annual rate: | | | | 35% |

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.

- Total accounted to date is 122.8k Fraser sockeye of which 13.4k are Early Stuart, 52.9k, Early Summer, 58.0k are Summer run and 2k are Late run
- Assessments are indicating a very low return.
- Early Summers are trailing off and Summer run is tracking the p10 forecast.

In-season Data Flow

a) Acoustics

- **Qualark:** Daily passage estimates have been low but increasing, ~7-8k last 3 days.
- **Mission:** Daily passage estimates at Mission have been low and steady in the ~4-5k last 3 days.
- Mission passage is generally aligning with test fishery projections.
- Hells Gate index counts have increased and some dead sockeye have been noted in the area.

b) Test fishing catch

- Marine acoustic tagging program is complete. All marine tags (~200) were applied to assess BigBar passage.
- Higher than average jacks appear to have been encountered in some marine test fisheries.
- **Marine Area:** Catches have been consistently low in both approach areas.

- **Fraser River:** Catches have remained low at Cottonwood and Whonnock but steady and higher at Qualark. Whonnock test fishery is still operating at Glen Valley Bar and seals were noted to be an issue at Cottonwood.

c) Stock Proportions

- Although abundances are low stock composition appears to be transitioning as expected. There are no strong indicators of late timing.
- **Fraser River:** Low sample sizes, stock composition is dominated by Summer and Early Summer sockeye with some Late Run now detected in-river.
- **Marine Area:** Good sample sizes in marine area, stock composition is dominated by Summer and Early Summer sockeye with some Late Run now detected in lower levels.
- Given the uncertainty in the forecasts at age the age composition is similar to expectations except for Bowren, Chilko and Upper Pitt. In the case of Chilko a smaller proportion of 4 year old fish have returned to date.

d) Environmental Conditions and Management Adjustments

- The temperature of the Fraser River at Qualark Creek on Aug 3 was 18.4°C, which is 0.4°C above average for this date.
- The Fraser River water discharge at Hope was 5779m³/s, which is approximately 40% above average for this date.

e) Big Bar Rock Slide Update

- 52 sockeye have been radio-tagged below Big Bar.
- 15,669 salmon have been counted at the Alfalfa sonar site (~10 km downstream of the slide).
- 2,771 salmon have been transported by the Whooshh to date.
- 341 salmon have been counted at the Churn Creek sonar site (~40 km upstream of the slide).
- 22 sockeye have been captured at the fish wheel.
- 132 sockeye have been transported to French Bar.
- 105 sockeye have been taken to Cultus.

f) Observations Throughout the Watershed

- Limited selective Chinook directed fisheries have begun in the Mid Fraser area.
- Helicopter effort overflights reported ~200 sick looking sockeye below Hells Gate and Alexandria.
- In recent years when water temperatures are high most sick fish have been observed above Hells Gate. With the high discharge it seems more have been observed below indicating the early arriving fish have likely had difficulty migrating under previous flow conditions.

Reports From Other Areas

- None

Assessments and Recommendations

a) Escapement Projections and Run Size Assessment

- Projecting 48.6k sockeye to pass Mission over the next 6 days.
- The return is now tracking the p10
- Although run size estimates are somewhat uncertain the PSC and FRP agree it is important to send a message that the return is much lower than the p50 forecast.
- ***The PSC recommended and the FRP adopted an Early Summer run size of 72k (p10) with July 17 A20 timing.***
- ***The PSC recommended and the FRP adopted a Summer run size of 311k (p25) with August 7 A20 timing.***
- There is no TAC expected in 2020.

Current Fraser River Panel Adopted Values and Potential Harvest (Adopted Changes in Bold)

| Management Group | In-season Run Size/ Forecast p50 | Timing A20 50%date | Proportional Mngt. Adjust. ^a | Available Harvest ^b | Allowable Harvest ^c |
|------------------|----------------------------------|--------------------|---|--------------------------------|--------------------------------|
| Early Stuart | 14,000 | Jul 7 | .69 | 0 | 1,400 |
| Early Summer | 72,000 | Jul 17 | .52 | 0 | 7,200 |
| Summer | 311,000 | Aug 7 | .16 | 0 | 31,100 |
| Late | 99,000 | Aug 6 | .41 | 0 | 9,900 |

^a Proportional Management Adjustment is multiplied by the escapement target to calculate the numerical management adjustment.

^b Available harvest after deductions. Harvest includes all catch from available TAC in all fisheries in Canada the United States. TAC will be assessed in-season.

^c Allowable harvest in an LAER scenario. Allowable harvest in a no TAC scenario is not a target and would be considered a maximum and includes catch in all fisheries in Canada and the United States and may include fishery induced mortalities. Most harvest in a LAER scenario is incidental harvest in fisheries directed at more abundant stocks or species.

b) Criteria for Fishing Decisions

- None

c) Fishery Recommendations

US Recommendations for Panel Waters:

- None

CA Recommendations for Panel Waters:

- None

d) Fishery Evaluation

- None

Other Business

- Given the very low returns the FRP decided to end the marine PSn test fisheries and the in-river Cottonwood test fishery to reduce costs and impacts on Fraser sockeye. by one day (Tuesday Aug 4) so further extension on possible end dates can be discussed at the

next Panel meeting. Cottonwood to end today (Aug 4th), A12 PSn tomorrow (Aug 5th) and A20 PSn to end on Thursday (Aug 6th).

Next Meeting

- Next Panel meeting Friday August 7