

# Ministry of Forests, Lands, Natural Resource Operations and Rural Development

## Flood Warning – Upper Fraser River (UPDATE)

Issued: 12:00PM July 1, 2021

The River Forecast Centre is **maintaining** the **Flood Warning** for the **Upper Fraser River** including:

- **Upper Fraser River including the Robson Valley and areas from Sinclair Mills upstream to Torpy, Dome Creek, Dore River, McBride and surrounding tributaries**

Temperatures continued to trend upward on Wednesday in the headwaters of the Upper Fraser. The average maximum temperature at four of the high elevation automated snow weather stations had been increasing as follows; June 24: 14.2°C, June 25: 20.3°C, June 26: 26.3°C, June 27: 29.4°C, June 28: 31.5°C, June 29: 32.8°C. The maximum temperature increased even higher on Wednesday June 30<sup>th</sup> reaching an average of 33.1°C. The average elevation at these stations is 1,725 metres above sea level. Fortunately, the minimum temperatures this morning were 3 to 5°C cooler than yesterday's values at the snow stations. The extreme heat has been rapidly melting the unmonitored high elevation snowpack, perennial snow and glaciers.

Environment and Climate Change Canada (ECCC) forecasts cooling temperatures over the upcoming few days. The current forecast at McBride has the following maximum temperatures; Thursday: 33°C, Friday: 31°C, Saturday: 29°C, Sunday: 29°C. Although still very hot, the relatively cooler temperatures will reduce the rate of snow and glacier melt and flows are beginning to recede or will be very soon. The greatest risk for the following 10-day period will be if a basin-wide moderate to heavy rainfall event occurs. The rivers are extremely vulnerable to any additionally inputs from precipitation.

The status of rivers in the region at 11:00PDT on July 1<sup>st</sup>:

- FRASER RIVER AT RED PASS (08KA007) is flowing at 332 m<sup>3</sup>/s (between 10 and 20-year flow) and is beginning to recede. The river reached a peak flow of 344 m<sup>3</sup>/s at around noon on Wednesday, June 30<sup>th</sup>. With cooler temperatures in the forecast the Fraser River at Red Pass is forecast to continue receding unless heavy rain occurs in the upcoming days.

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- FRASER RIVER AT MCBRIDE (08KA005) is flowing at approximately 1420 m<sup>3</sup>/s (above 100-year flow) and continues to rise. At the moment it is essentially matching the historical recorded peak flow for the river of 1424.5 m<sup>3</sup>/s set in June 1972. The 1972 high flow was a basin-wide heavy rainfall event occurring during a period of high snowmelt. Pre-ceding maximum temperatures in McBride reached 28°C for three consecutive days and was followed by 50.8 mm of precipitation on June 11-12, 1972. The hydrometric station became operation in 1953 and does not have measurements for the 1948 flood. The CLEVER model shows continued increases in flow today before receding due to cooler temperatures. The Fraser River at McBride will be extremely vulnerable to any rainfall event occurring over the next few days.
- DORE RIVER NEAR MCBRIDE (08KA001) reached 142 m<sup>3</sup>/s (between 10 and 20-year flow) on Wednesday evening and was slightly lower than the peak from Tuesday evening suggesting that the snowpack is becoming a limiting factor as it continues to melt. Flows are expected to recede unless there is a rainfall event.
- MCKALE RIVER NEAR 940M CONTOUR (08KA009) reached approximately 81 m<sup>3</sup>/s (between 2 and 5-year flow) on Wednesday evening. Snow has become a limiting factor and flows are expected to recede.
- MORKILL RIVER BELOW HELLROARING CREEK (08KA013) reached approximately 255 m<sup>3</sup>/s (below 2-year flow) on Wednesday evening. Flows are continuing to recede.

Details of the CLEVER Model forecasts for this region can be found at:

[http://bcrfc.env.gov.bc.ca/freshet/map\\_clever.html](http://bcrfc.env.gov.bc.ca/freshet/map_clever.html)

The public is advised to stay clear of the fast-flowing rivers and potentially unstable riverbanks during the high-streamflow period.

The [River Forecast Centre](#) continues to monitor the conditions and will provide updates as conditions warrant.

BC River Forecast Centre

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A **High Streamflow Advisory** means that river levels are rising or expected to rise rapidly, but that no major flooding is expected. Minor flooding in low-lying areas is possible.

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A ***Flood Watch*** means that river levels are rising and will approach or may exceed bankfull. Flooding of areas adjacent to affected rivers may occur.

A ***Flood Warning*** means that river levels have exceeded bankfull or will exceed bankfull imminently, and that flooding of areas adjacent to the rivers affected will result.