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

Flood Watch – Upper Columbia (MAINTAINED) Issued: 11:00AM July 1, 2021

The River Forecast Centre is maintaining the Flood Watch for:

Upper Columbia, including the Columbia River mainstem and tributaries around
 Donald, Golden, Radium, Invermere and surrounding areas

Extraordinarily hot temperatures over the past week led to unprecedented snowmelt rates from high elevation terrain from the Rocky Mountain and Columbia Mountains. The automated snow weather stations in the province that had remaining snowpack were melting at 80 to 100 mm per day of snow water equivalent. Rivers in the Upper Columbia rose in response to the snowmelt and are beginning to level off as temperatures become slightly cooler. Many gauged rivers in the region reached flows between 5-year and 20-year return period levels. It is unlikely for rivers in the Upper Columbia to reach higher levels flows from snowmelt, alone. The Upper Columbia is extremely vulnerable if a basin-wide moderate to heavy rainfall event occurs in the upcoming 10-days.

A summary of hydrometric stations in the region as of 10:30PDT:

- SPILLIMACHEEN RIVER NEAR SPILLIMACHEEN (08NA011) is flowing at approximately 235 m³/s (between 2 and 5-year flow) and forecast to recede.
- COLUMBIA RIVER AT NICHOLSON (08NA002) is flowing at 534 m³/s (5-year flow) and may rise a
 little higher before leveling off.
- KICKING HORSE RIVER AT GOLDEN (08NA006) is flowing at approximately 265 m³/s (between 2 and 5-year flow) and forecast to recede.
- BLAEBERRY RIVER ABOVE WILLOWBANK CREEK (08NB012) is flowing at 122 m³/s (10-year flow) and has been slowly receding over the last few days.
- COLUMBIA RIVER AT DONALD (08NB005) is still gradually rising and currently flows at 863 m³/s
 (between 5 and 10-year flow). It is expected to begin leveling off soon.

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- BEAVER RIVER NEAR THE MOUTH (08NB019) is flowing at 270 m³/s (between 5 and 10-year flow). Flows have remained steady over the past week. The CLEVER model is forecasting a significant drop over the upcoming two days, but flows will likely recede slower than modeled.
- GOLD RIVER ABOVE PALMER CREEK (08NB014) is flowing at 82 m³/s (2-year flow) and is steadily receding.
- CANOE RIVER BELOW KIMMEL CREEK (08NC004) reached 124 m³/s (20-year flow) early this morning. It is unlikely for flows to go higher unless rain occurs in upcoming days.
- GOLDSTREAM RIVER BELOW OLD CAMP CREEK (08ND012) is flowing at 235 m³/s (between 2 and 5-year flow) and will likely reach a similar daily peak as the past few days before receding.
- ILLECILLEWAET RIVER AT GREELEY (08ND013) reached approximately 302 m³/s (2-year flow) and is forecast to continue receding.

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

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 <u>River Forecast Centre</u> 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.

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.