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

Flood Warning – Sumas (MAINTAINED)

Flood Watch – South Coast (UPGRADED)

ISSUED: 12:30 PM November 25, 2021

The River Forecast Centre is upgrading to a **Flood Watch** for the **South Coast** including:

- Sea-to-Sky including areas around Squamish, Whistler and Pemberton
- Sunshine Coast
- Howe Sound

into rivers and creeks.

- North Shore Mountains
- Lower Mainland including areas along the Fraser Valley and areas around Hope

The River Forecast Centre is maintaining a **Flood Warning for**:

Sumas River including Sumas Prairie and surround area

The first of a series of storms has arrived on the South Coast. The storm is bringing heavy rainfall, with rainfall totals forecast to range between 40-70mm over the Fraser Valley and 50-80mm over the North Shore Mountains and Howe Sound, with higher amounts possible over higher terrain.

A subsequent atmospheric river event is forecast for the weekend with precipitation arriving mid-day on Saturday. Rainfall totals are expected to be higher for the weekend event.

Additionally, temperatures will be warmer resulting in higher freezing levels. There is a greater risk for a rain-on-snow event to melt much of the current snowpack, adding additional water

A third atmospheric river is forecast to reach British Columbia next Tuesday/Wednesday (Nov 30-Dec 1st). It is still too far into the future to provide exact details regarding the impacts and severity of this third storm.

Rivers are expected to see rises on Thursday in response to the first rainfall event, with the potential for highest flows (2-year to 5-year) expected around the Sunshine Coast, Howe Sound and North Shore corridor. Rivers in the Fraser Valley are expected to see rises, though currently

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these are expected to be more typical in magnitude for fall storms, however these may be more problematic to flood response and recovery efforts and damaged infrastructure in the region.

The second system arriving over the weekend will likely be more problematic. It is currently forecast to have higher rainfall totals, warmer conditions resulting in additional snowmelt and will occur immediately after the current storm system. There is potential for flows to reach 10-year to 50-year levels (or higher)—likely occurring Sunday or Monday.

Flood levels on Sumas Prairie and on the Sumas River have been slowly receding. Additional rainfall from the Wednesday to Friday event is expected to provide additional runoff into affected areas and may slow the rate of the recession of water levels there. On the Nooksack River, the Northwest River Forecast Centre (NOAA) is currently forecasting the potential for the Nooksack River to reach overbank flood stage at Cedarville and Ferndale on Friday and again on Sunday, with ongoing risks again later next week. A flood watch has been issued by the National Weather Service (US) for Whatcom County and the Nooksack River. Overflow from the Nooksack River into the Sumas River drainage is possible, as this scenario has the potential to emerge if higher than forecast rainfall occurs into the Nooksack River watershed.

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

Details of the COFFEE and CLEVER Model forecasts can be found at:

http://bcrfc.env.gov.bc.ca/fallfloods/map_coffee.html, and

http://bcrfc.env.gov.bc.ca/freshet/map_clever.html

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.

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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.