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

UPDATE:
Flood Warning – Sumas River and Sumas Prairie (MAINTAINED)
High Streamflow Advisory – Coquihalla, Chilliwack River, Lower Fraser tributaries, South Coast (DOWNGRADED)
ISSUED: 15:30 PM December 2, 2021

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

- **Sumas River including Sumas Prairie and surround area**

The River Forecast Centre is **Downgrading** to a **High Streamflow Advisory for:**

- **Coquihalla River**
- **Chilliwack River, and tributaries**
- **Lower Fraser Valley, including Kanaka Creek, areas near Haney, areas around Hope, and other tributaries**

The River Forecast Centre is **Downgrading** to a **High Streamflow Advisory** for the **South Coast** including:

- **Sea-to-Sky including areas around Squamish, Whistler and Pemberton**
- **Sunshine Coast**
- **Howe Sound**
- **North Shore Mountains**
- **Lower Mainland**

The third in a series of atmospheric rivers ended in the early hours of Dec 2, 2021. This system dropped 70-165 m of rain in the Sea to Sky and Howe Sound area, 120-190 mm of rain on Metro Vancouver's North Shore, and 30-90 mm of rain in the Fraser Valley and Fraser Canyon. This third system was also a very warm system, melting up to 20 – 50 mm of snow water equivalent at elevations up to 1600 m throughout the region. Systems peaked late yesterday, December 1st, and into the early morning of today (Thursday December 2nd).

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Peak flows observed include:

- The Coquihalla River below Needle Peak (08MF962) peaked at 64 m3/s December 1st, a 10-20 year return period flow (slightly less than peak flows observed over the weekend due to the second of three atmospheric rivers). The downstream Coquihalla River above Alexander Creek (08MF068) peaked at 375 m3/s, a 2-5 year return period flow, and also slightly less than the peak from the second atmospheric river experienced over the weekend. Both sites saw a second, lesser peak later yesterday.
- The Chilliwack River above Slesse Creek (08MH103) peaked early morning Dec 1st at 366 m3/s, a 10-20 year return period flow greater than the peak Nov 28 due to the second of three atmospheric river events. Up to 50 mm of SWE loss was recorded within the Chilliwack watershed, adding to flows due to precipitation.
- The Squamish River at Brackendale (08GA022) peaked late Dec 1st/early Dec 2nd at 1640 m3/s, a 2-5 year return period flow. 20-40 mm of SWE melt contributed to rainfall.
- The Lillooet at Pemberton river (08MG005) peaked at 442 m3/s, less than a 2-year return period flow.

The short-term outlook is for limited precipitation as well as falling temperatures, favouring snow rather than rain for most elevations. This weather forecast is favourable for the continued recession of streams throughout the region; however, this high streamflow advisory recognizes that streams are still flowing at high volumes as they recover from a quick succession of storms.

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 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.

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.