

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

UPDATED – Flood Warning – Chemainus River

MAINTAINED - Flood Warning – Englishman River, Cowichan River, Koksilah River

MAINTAINED - Flood Watch – Southern Vancouver Island

MAINTAINED - High Streamflow Advisory – West Vancouver Island, East Vancouver Island, Central Vancouver Island

UPDATE: 14:00 PM November 15, 2021

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

- **Chemainus River (NEW)**
- **Englishman River**
- **Cowichan River**
- **Koksilah River**

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

- **South Vancouver Island (other tributaries)**

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

- **Central Vancouver Island including tributaries around Port Alberni**
- **South Vancouver Island**
- **West Vancouver Island**
- **East Vancouver Island**

A significant atmospheric river has made landfall across southern coastal regions of British Columbia. Observed rainfall amounts since Saturday have been in the 120-270mm range across Southern Vancouver Island and 60-175mm across Western, Central and Eastern Vancouver Island.

Environment and Climate Change Canada have continued rainfall warnings in effect across the region. Additional heavy rainfall is expected throughout the region overnight and is expected to taper off around Monday afternoon.

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Temperatures have been rising, with temperatures in the 5-7°C range being observed at automated snow weather stations across the region. Snowmelt is being observed at mid-elevations and is expected to add additional runoff to rivers.

Rivers have risen rapidly from rainfall since yesterday. Current conditions (as of 14:00 PDT Nov 15, 2021) include:

- Englishman River near Parksville (Water Survey of Canada gauge 08HB002) is flowing at 673 m³/s (near a 50 year flow), however, the rate of river rise has slowed. Additional rises are possible, but any additional rises will be less than experienced this morning.
- Chemainus River near Westholme (08HA001) is flowing at 648 m³/s (20- 50 year return period), and has begun to level off.
- Cowichan River near Duncan (08HA011) is flowing at 650 m³/s (approaching a 20-year return period flow) and has begun to level off.

Stream areas close to the ocean will also see contributions from rising tides, where the afternoon high tide will unfortunately coincide with peaking river flows. CLEVER and COFFEE forecasts only include river flows, and does not include any tidal influences; thus, please compensate accordingly for flows on any sites that are near their ocean outlet (throughout all southern Vancouver Island).

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

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

http://bcrcfc.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.