BC Environment
River Forecast Centre

Flood Warning: 15Jan2010 5:45AM

- **Cowichan River**
- **Koksilah River**

Flood Watch Maintained:

- **Chemainus River**

Flood Watch ENDED:

- **Port Alberni area**
- **Nanaimo River**
- **Englishman River**
- **Oyster River**
- **Tsolum River**
- **Browns River**
- **And other creeks and streams in these areas**

The Ministry of Environment issued a Flood Watch for a number of Vancouver Island rivers yesterday. The **Flood Watch** is upgraded to a **Flood Warning** for the Cowichan and Koksilah rivers. The **Flood Watch** is maintained for the Chemainus River. The **Flood Watch** for all other Vancouver Island rivers is ENDED.

Heavy precipitation has been recorded on Vancouver Island, with 150-200 mm measured at some west island locations, 80-120 mm measured on the central island, and 40-80 mm on the east island. However, temperatures have remained cold overnight and much of the precipitation across the central island has occurred as snow, not rain. The freezing elevation appears to have risen to no more than 1400 metres overnight, and is now dropping slowly. The Wolf River snow pillow (1420 m elevation, west of Campbell River) did not rise above freezing during this event. The Jump Creek snow pillow (1130 metres elevation, west of Nanaimo) rose to +3 degrees for a few hours overnight but has since fallen to +1 degrees. For the Cowichan River, all its drainage area is below 1150 metres elevation, and precipitation has occurred there as rain, and is continuing at a rate of 5-6 mm/hr as of 5AM. Precipitation on the central island

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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.

(Port Alberni to Campbell River areas) has eased to 1-3 mm/hr, occurring as rain at low elevation and snow above about 1300 metres elevation.

The Cowichan River has risen above a 2-year return period water level, and is rising at about 5 cm/hour. It's current water level at the WSC gauge is 2.79 metres. Its peak during the 20-Nov-2009 flood event was 3.38 metres. With the current rate of rise, the Cowichan River would reach that level again by approximately 3PM today. The tide is high (4.9 metres) at 7AM, and falls to 3.7 m at noon, and rises again to 4.3 m near 4PM.

The low elevation Chemainus River basin is also receiving steady rainfall, and the Chemainus River is rising steadily and is approaching a 2-year return period level.

The Nanaimo and Englsihman rivers are rising, but are currently well below warning level.

Rivers in the Courtenay to Campbell River (Tsolum, Browns, Cruikshank, Puntledge, Oyster) area have received significant precipitation (100 mm recorded in the Comox Lake basin), but it has been occurring as snow, with rain only below approximately 1400 metres elevation). Rivers in the Courtenay to Campbell River area have shown small increases in water level overnight.

The forecast from Environment Canada is for precipitation to continue in the Cowichan basin and south Vancouver Island area this morning, before easing near noon. By this afternoon the front will have shifted south and east and be off Vancouver Island.

The River Forecast Centre will provide an update by 3PM Friday, or earlier if necessary.