

BC Environment

River Forecast Centre

Water Supply and Streamflow Conditions

Issued: August 10, 2009

Rainfall has been occurring overnight and today across Vancouver Island and the South Coast, and river levels are improving. Rivers in the South Interior, however, continue to be very low for this time of year. Areas of concern are:

- **Extremely Dry** (near or below previously recorded low for the date)
 - o Nicola River and tributaries, Chase Creek and tributaries, Salmon River and tributaries (Falkland and Salmon Arm), and adjacent basins in the lower Thompson River and mid-lower Fraser basin.
 - o Vaseux Creek, Camp Creek and Trepanier Creek, and likely others rivers in the Okanagan basin.
- **Dry to Very Dry** (10-25 year return period low flow) – South Thompson/Shuswap, Okanagan, Kettle, Similkameen, Kootenay/Columbia (except south-east corner).

The sustained hot weather affecting much of British Columbia in mid July ended last week, with temperatures returning to near seasonal normals. With the exception of some dispersed convective activity last week, no significant rainfall occurred in the south interior. As a result, river levels across the southern quarter of British Columbia remain well below median flows for the date. The cooler weather, though, has eased the rate of decline in river levels, with many rivers remaining steady over the last 7 days. Some rivers continue to be at or near historic lows of record for the date. The effect of the sustained hot and dry weather is now being reflected in the upper and mid Fraser River, with water levels dropping rapidly to about 80-90% of median levels for the date (up until the last week or so, the upper and mid Fraser River was above median).

Areas of Low Flow Concern:

South Thompson Basin: All gauged rivers are currently well below their median flows for the date.

- The Nicola River and Coldwater River are at or below their extreme low flows of record (40-50 year return period low flows). The extreme low flows on the Nicola and Coldwater rivers (and likely other ungauged streams in the Nicola basin) have them on a trajectory towards new record low flows in late August or early September.
- Chase Creek remains near its record low flow for the date.
- The Salmon River at Falkland is near its record low flow for the date. The Salmon River at Salmon Arm is below its record low flow for the date.
- The Seymour River at Seymour Arm (north Shuswap Lake) is near its record low flow for the date.
- Other rivers in the South Thompson basin (e.g., South Thompson River at Chase, Eagle River, Bonaparte River) are near 10-20 year return period low flows. This likely includes other ungauged Shuswap Lake and Shuswap River tributaries.

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Similkameen River Basin: A drought was declared in May 2009 for Osoyoos Lake by the International Osoyoos Lake Board of Control, based on a forecast of well below normal runoff for the Similkameen River.

- The Tulameen River at Vuich Creek (upper basin) is below its historic low flow for the date. The Tulameen River at Princeton is at its historic low flow.
- Water levels are receding on the Similkameen River basin following a thunderstorm in the basin in late July. The Similkameen River at Hedley is now near a 10-year return period low flow.

Okanagan River and Kettle River Basin:

- Vaseux Creek (in the southern Okanagan, east of Oliver) is extremely dry, and remains below its record low flow for the date.
- Camp Creek and Trepanier Creek (on the west side of the Okanagan valley) are extremely dry, and are at or near their record low flows for the date.
- Most other gauged rivers in the Okanagan basin are near 10-20 year return period low flows for the date.
- The Kettle River (Westbridge, Grand Forks) is at a 10-20 year return period low flow.

South Coast: Much of the South Coast has received significant rainfall overnight and today, with addition rain expected over the next couple of days. River levels have increased notably, to be near or above median levels. The Stave River remains notably low, however.

- The upper Seymour River, the Chilliwack River, the Clowhom River, the Coquihalla River, and the Nicomekl River have all increased in level and are above median.
- The Stave River area appears to have received minimal rain so far, and it remains below its historic minimum level for the date.

Vancouver Island: Portions of Vancouver Island has received significant rainfall overnight and today, with addition rain expected over the next couple of days. Some river levels have increased notably, to be near or above median levels.

- Levels on Tofino Creek, Browns River, and others, have risen today and are now above their median levels.
- The Cruikshank River remains below its historic low flow for the date.
- Regulated rivers such as the Nanaimo and Englishman rivers have higher flows relative to other rivers, and are near their median flows for the date as a result of releases from storage.

Outlook: Temperatures been near seasonal normals for much of the past week, and are forecast to be somewhat cooler than normal for the next 4-5 days. Environment Canada is forecasting continued rainfall for the South Coast and Vancouver Island for the next couple of days, with as much as 20-40 mm anticipated. River levels are expected improve significantly. The Thompson-Nicola-Okanagan-Kettle is expected to be 2-4 degrees cooler than normal for the next 4-5 days, with possible rain showers. The cool weather will ease the rate of decline of river levels, but significant rainfall is required.