

BC Environment

River Forecast Centre

Water Supply and Streamflow Conditions

Issued: September 11, 2009

The upper trough over BC during the past week brought precipitation to all parts of the province, and in some cases there was significant rainfall. The majority of the rainfall occurred on the long weekend, but some areas received additional rainfall mid-week. Weather stations reported between 13-65 mm in the South Thompson and Nicola region, 12-59 mm in the upper and mid-Fraser, 15-38 mm in the Okanagan, 16-45 mm in the Kettle basin, 31-58 mm in the Similkameen/Tulameen, 33-160 mm on the South Coast mainland, 26-87 mm on eastern Vancouver Island, and 99-239 mm on the west coast of Vancouver Island. As a result, river levels throughout the province have increased. However, now that precipitation has ended, some river levels have started to fall once again. Despite the improvement in river levels throughout the province, there continue to be areas of concern and low flow monitoring will continue.

- **Extremely Dry** (near or below previously recorded low for the date)
 - Due to the precipitation that occurred over the past week, there are currently no gauged rivers at or below their previously recorded low flow for the date.
- **Dry to Very Dry** (10-25 year return period low flow)
 - Lower Thompson River (Spences), South Thompson and tributaries (Salmon River at Falkland and Shuswap River); Vaseux Creek in the Okanagan; West Kettle and Kettle rivers

Areas Being Monitored for Low Flow Concern:

Thompson Basin: Significant precipitation was recorded in many parts of the basin from September 3-7, and some areas received additional rainfall on September 9th. The Nicola basin reported 25-31 mm in the lower basin (Paska Lake and Merritt), 47 mm in the upper basin at the Fire Weather station at Glimpse, and 56 mm in the upper Coldwater at Thynne Mountain. The South Thompson basin reported a range of 13 mm (Salmon Arm) to 65 mm (Curwen Creek in the upper Shuswap), and 26 mm was measured at Kamloops. Water levels on all of the gauged streams improved over the long weekend and into the middle of this week. However, with the return to warm, dry conditions, water levels began to decline yesterday and are expected to continue to fall into the beginning of next week.

- The upper Nicola River (above Nicola Lake) increased in flow following Sunday's rain. It is currently near a 5-year low flow. Flow on the Coldwater River at Brookmere has risen to be above its median for today. The Coldwater at Merritt is rising slowly today.
- Chase Creek and the Bonaparte River both increased their flow following the rain, and are now near 5-year return period low flow levels as of today.
- The Salmon River at Falkland and Shuswap River both show some increase in discharge over the past 5 days, following the rainfall. They are all above the minimum flow of record, but continue to near 10-25 year return period low flows.
- Other rivers in the South Thompson basin (Eagle River, Seymour River, lower Salmon River near Salmon Arm) have improved to near 5-year return period low flows.

BC Environment

River Forecast Centre

- The North Thompson River at McLure and Blue River are between 5 and 10-year return period low flows.
- The mainstem of the lower Thompson River at Spences Bridge is below a 20-year low flow.

Upper and Mid-Fraser Basin: Measured precipitation in the Upper Fraser ranged from 12 mm at Valemount to 38 mm in the McGregor. In the mid-Fraser, 59 mm was recorded in the Cariboo at Matthew and 44 mm at Horsefly.

- The upper Fraser River mainstem and its tributaries are between median levels and a 5-year return period low flow.
- The Horsefly River improved significantly and is currently above median flow for the date.

Okanagan River and Kettle River Basin: Over the past week, precipitation in the Okanagan basin ranged from 15 mm in the northwest (Fintry) to 38 mm in the western valley at Brenda Mines. In the south, Penticton received 26 mm. The west Kettle valley recorded 24-31 mm, and as much as 45 mm in the upper basin. In the south, only 16 mm was recorded at Rock Creek.

- Vaseux Creek (in the southern Okanagan, east of Oliver) has improved but is currently below a 10-year return period low flow.
- Camp and Whiteman creeks have improved to a 5-year return period low flow.
- Trepanier Creek (west Okanagan valley) and Mission Creek (Kelowna) have improved to near median flow levels for the date.
- Although water levels have improved slightly, the Kettle and West Kettle rivers continue to be near 10-year return period low flows.

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. Precipitation measured in the basin over the past week included 58 mm in the upper basin (Allison Pass), 31 mm in the lower basin (Ashnola), and 52 mm at Princeton.

- The Tulameen River has improved to a median flow for the date.
- The Similkameen River is currently above median flow.

South Coast: Two frontal systems brought significant precipitation to southwest BC and some areas of the South Coast mainland received significant rainfall, particularly on the North Shore and the eastern Fraser Valley. 160 mm was recorded at Capilano, 58 mm at Chilliwack Nursery, and 89 mm was measured at Haig Camp near Hope. Other areas received lesser amounts (e.g. 33 mm at Vancouver Airport). River levels have improved in all areas to above median flow for the date, and there are currently no low flow concerns.

Vancouver Island: Significant precipitation was also recorded on Vancouver Island during the past week, particularly on the west coast. Tofino recorded 99 mm, and all Fire Weather

BC Environment

River Forecast Centre

stations measured well over this amount. On the eastern side of the island, lesser amounts were recorded, ranging from 26 mm in the south (Victoria) to 87 mm in the north (Port Hardy). River levels have improved in all areas to above median flow for the date, and there are currently no low flow concerns.

Outlook:

The current weather forecast is for a strong upper ridge to continue to build over the southern two-thirds of the province into the weekend. Conditions in the central and southern interior will be warm and dry into the beginning of next week, with daytime high temperatures in the mid to upper 20s for most regions, and low 30s in the Kamloops and Princeton areas. On the south coast, temperatures will also be above normal for Friday and Saturday (low to mid 20s). By Sunday, the ridge will begin to break down on the coast and temperatures will return to normal with a chance of showers on Monday. With no significant precipitation forecast for the next 5 days, river levels in all areas of southern BC are expected to remain stable or decline into next week, but are expected to remain above their prior low flow conditions during August.