

BC Environment

River Forecast Centre

Water Supply and Streamflow Conditions

Issued: August 25, 2009

During the past week in the southern interior the weather was mainly sunny with normal to above normal temperatures and no significant precipitation, with the exception of a few scattered showers on August 21st. As a result, many rivers have again declined to their previous record or near record low levels prior to the rainfall event on August 13-15. From August 21-23, in the central interior a series of convective storms produced rainfall in the upper Fraser and Cariboo regions. River levels in the upper Fraser and its tributaries have improved significantly from their record lows the previous week. River levels in the mid-Fraser and its tributaries have also improved, with the exception of the Horsefly River. Eastern Vancouver Island and the South Coast were also primarily warm and dry during the past week, and many rivers have dropped to levels prior to the rainfall event on August 9-11. Areas of concern are:

- **Extremely Dry** (near or below previously recorded low for the date)
 - o Lower Thompson River (Spences) and tributaries (Upper Nicola and Coldwater rivers)
 - o South Thompson and tributaries (upper Salmon River (Falkland), Shuswap River (Lumby and Enderby), Seymour River, and Chase Creek)
 - o Vaseux, Mission, and Whiteman creeks in the Okanagan
 - o Clowhom and Stave rivers on the South Coast
 - o Oyster and Cruikshank rivers on Vancouver Island
- **Dry to Very Dry** (10-25 year return period low flow)
 - o South Thompson - lower Salmon River near Salmon Arm and Eagle River; North Thompson and tributaries; Horsefly River; Camp and Trepanier creeks, and likely other rivers in the Okanagan; West Kettle River; Tulameen River; eastern Vancouver Island

Areas of Low Flow Concern:

Thompson Basin: All of the gauged streams are below or well below their median flows to date.

- The upper Nicola River and Coldwater River (Brookmere and Merritt) have returned to near record low flows.
- The mainstem of the lower Thompson River at Spences Bridge is also at a record low flow.
- The Salmon River at Falkland, Seymour River at Seymour Arm, and Shuswap River near Lumby and Enderby remain at or near record low flow for the date.
- Other rivers in the South Thompson basin (Eagle River, lower Salmon River near Salmon Arm) are near 10-20 year return period low flows.
- The North Thompson River has improved to below a 10-year return period low flow, although the Blue River remains below a 20-year return period low flow.

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Upper and Mid-Fraser Basin: A series of convective storms produced rainfall in the upper Fraser (10-16 mm) and Cariboo (1-5 mm) regions from August 21-23, and the upper Fraser River mainstem and its tributary water levels have improved.

- The upper Fraser River mainstem and its tributaries have improved to 5-10 year return period low flows.
- The Horsefly River remains below a 10-year return period low flow.

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 lack of precipitation over the past week has rapidly caused river levels to return to levels of concern.

- The Tulameen River has dropped to below a 20-year return period flow.
- The lower Similkameen River has fallen to a 5-year return period low flow.

Okanagan River and Kettle River Basin: The Okanagan basin received no significant rainfall during the past week. As a result, water levels on most of the gauged streams in the Okanagan have returned to their previous low flow conditions.

- Vaseux Creek (in the southern Okanagan, east of Oliver), Mission Creek (Kelowna) and Whiteman Creek have dropped back down to near record low flows.
- Camp and Trepanier creeks (west Okanagan valley) have fallen to below a 10-year return period low flow.
- The Kettle and West Kettle rivers have dropped to 5-year and 10-year return period low flows, respectively.

South Coast: No significant precipitation was recorded on the south coast for the past week. However, there have been no major changes in river levels for most streams, with the exception of:

- The Clowhom and Stave rivers have fallen to near record or a new record low flow, respectively.

Vancouver Island: The western and northern parts of Vancouver Island received some precipitation during August 21-22 (5-12 mm). In contrast, the eastern side of the island remained dry for the past week and many streams have returned to levels of concern.

- The Cruikshank River (upper Campbell River basin) and Oyster River are near or at new record low flows.
- The Browns and Chemainus rivers are at 10-20 year return period low flows.
- 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:

The current weather forecast for southern BC is for continued sun and normal temperatures for today and tomorrow. By mid-week, a building high pressure ridge will cause temperatures to

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climb to above normal (low 30°C's) for Thursday through Monday. This high pressure ridge will also bring continued sun to the South Coast with temperatures in the mid to high 20°C's from Thursday into the beginning of next week. River levels throughout southern BC will continue to fall approaching the end of August.

Implications: The low water levels will likely result in such things as diminished water supply, lower than normal lake and reservoir levels, and reduced groundwater levels. There is potential in some areas and some rivers for significant effects on fish and aquatic organisms.