Okanagan Basin WATER BOARD
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MEMORANDUM

To: OBWB Directors

From: Sandra Schira, Water Science Specialist

Date: Sept. 29, 2025

Subject: Weather Update

Okanagan Basin Water Board
Regular meeting
Oct. 7, 2025
Agenda No: 7.6

Temperature

September saw a significant heatwave with temperatures much warmer than the 1991-2020 average. The Okanagan experienced weather more typical of summer, with some locations possibly recording the hottest temperatures on record for September (Figure 1). Extremely hot days were also high, with about five days with a maximum temperature over 30°C, across the Okanagan. Vernon and Kelowna reported two days over 35°C, which is very rare for this time of year. The heatwave also resulted in much warmer-than-normal evening temperatures.

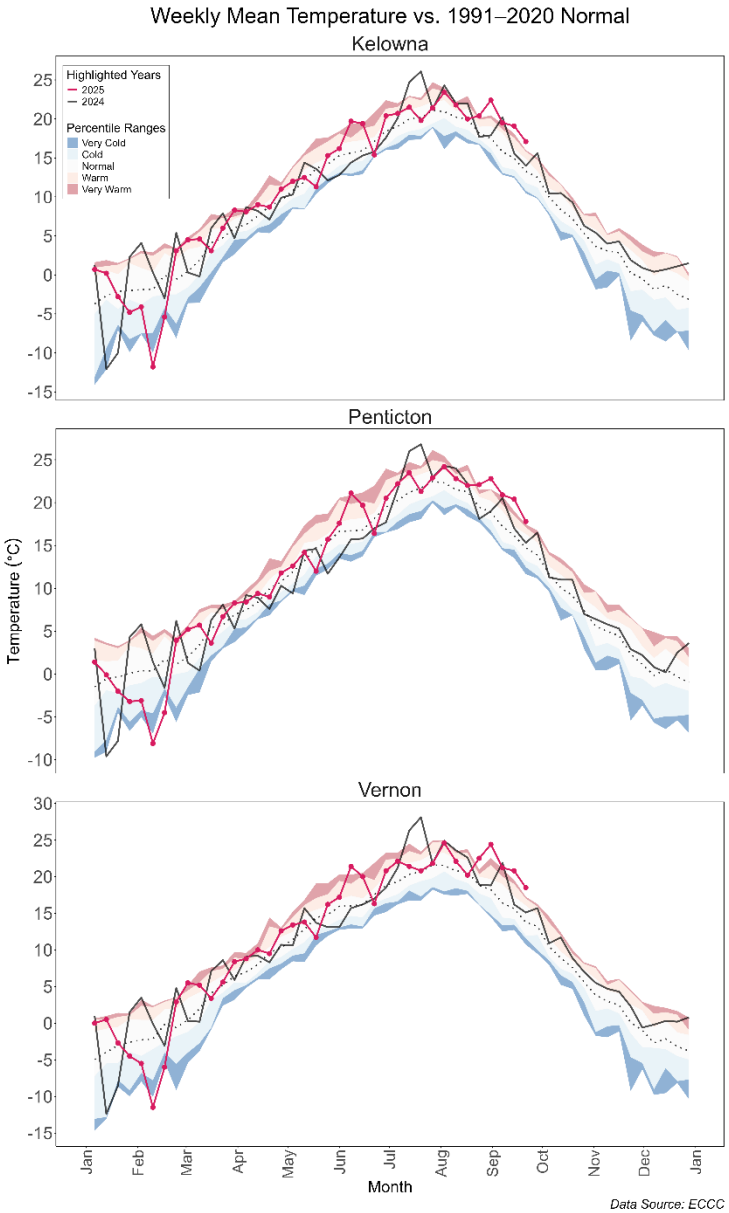


Figure 1: Weekly average temperature across the Okanagan as of Sept. 28, 2025.ompared to 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada.

Precipitation

As of Sept. 28, the monthly precipitation for September was well below the 1991-2020 average (Figure 2). In fact, all three cities had almost no rain in September. The consistently below-normal rainfall over the summer has contributed to the ongoing drought conditions across the valley. The deficit in total accumulated precipitation so far this year is outside the 1991-2020 range for both Vernon and Penticton (Figure 3).

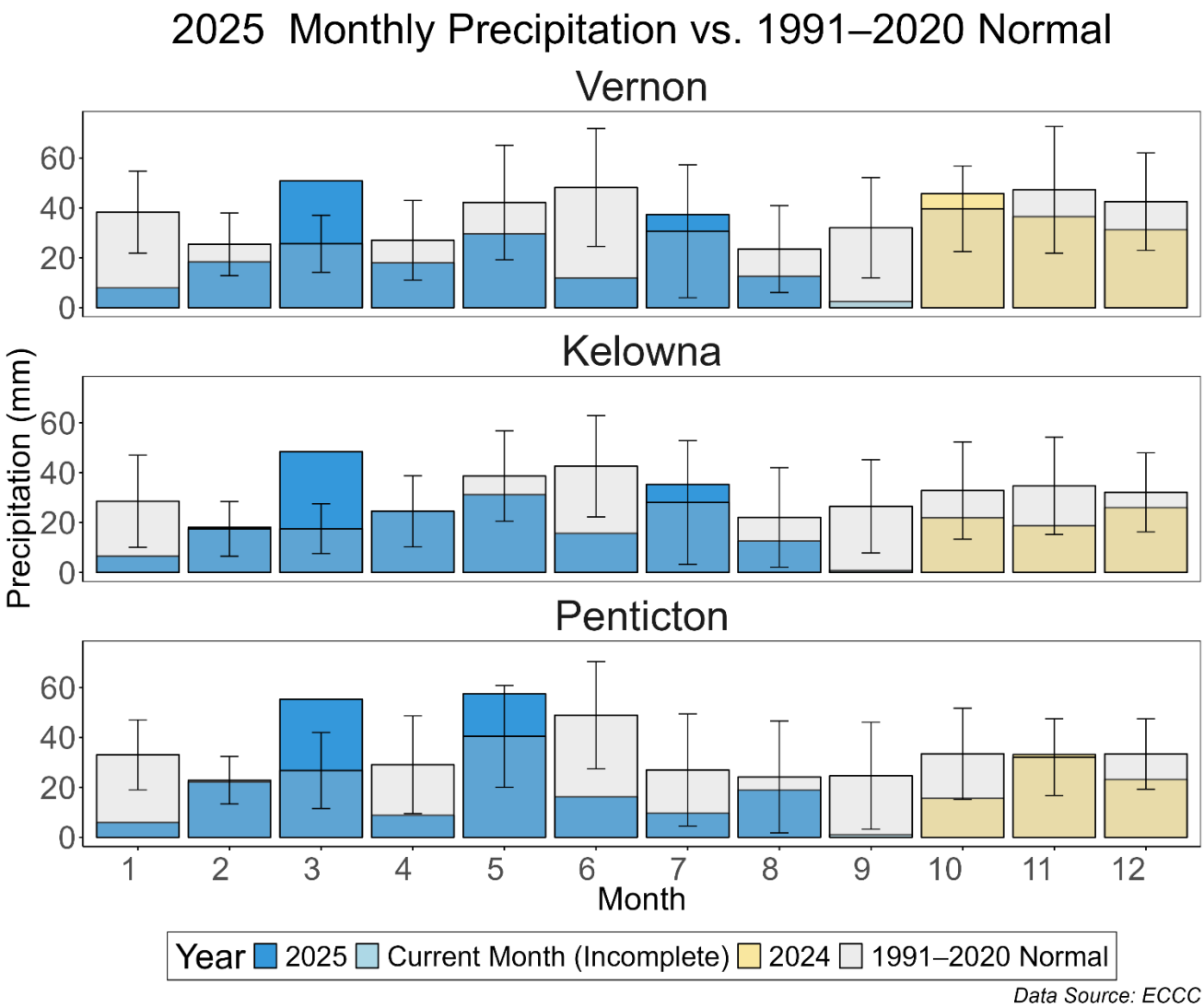
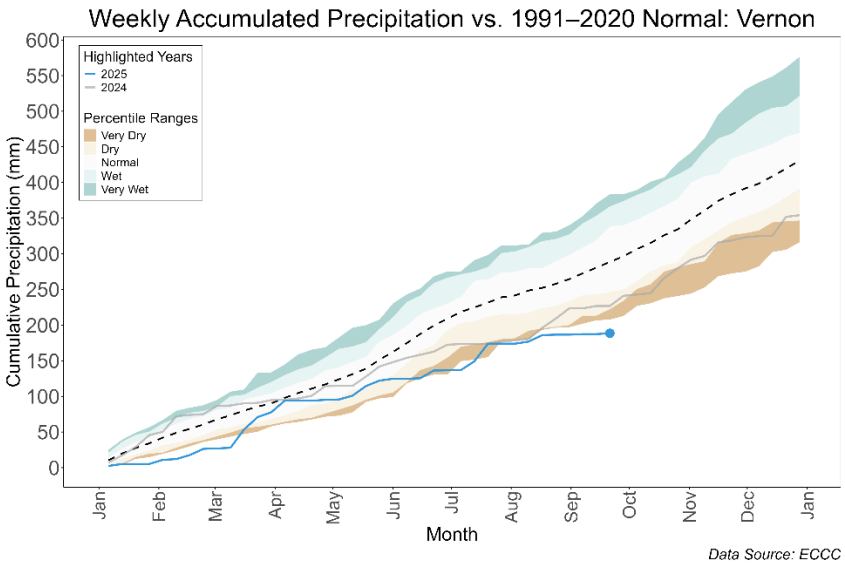
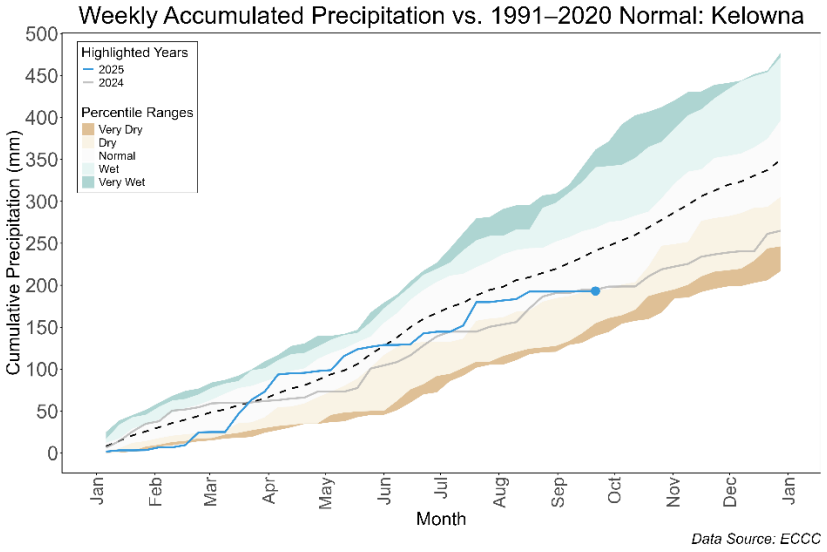


Figure 2: Monthly Precipitation in the Okanagan as of Sept. 28, 2025 compared to 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada.





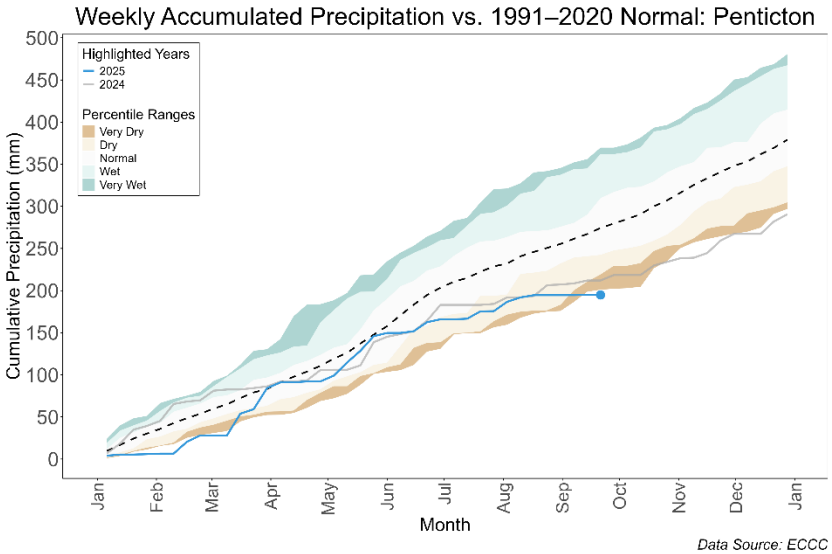


Figure 3: Cumulative weekly precipitation in the Okanagan as of Sept. 28, 2025 compared to the 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada.

Seasonal forecasts indicate that September through November is likely to be warm and wet. The Environment and Climate Change Canada[1] long-term seasonal forecast indicates a medium likelihood of above-normal temperatures in the Okanagan over the next three months. Precipitation forecasts also show a medium likelihood for above-normal precipitation (Figure 4). Seasonal forecasting is highly challenging, so disagreement between models or variations from projections is not uncommon. The forecasts show the likelihood of above or below normal conditions and do not show by how much those conditions vary. Seasonal forecasts can be used to provide a sense of likely future conditions, but they should not be taken as 100 per cent certain.

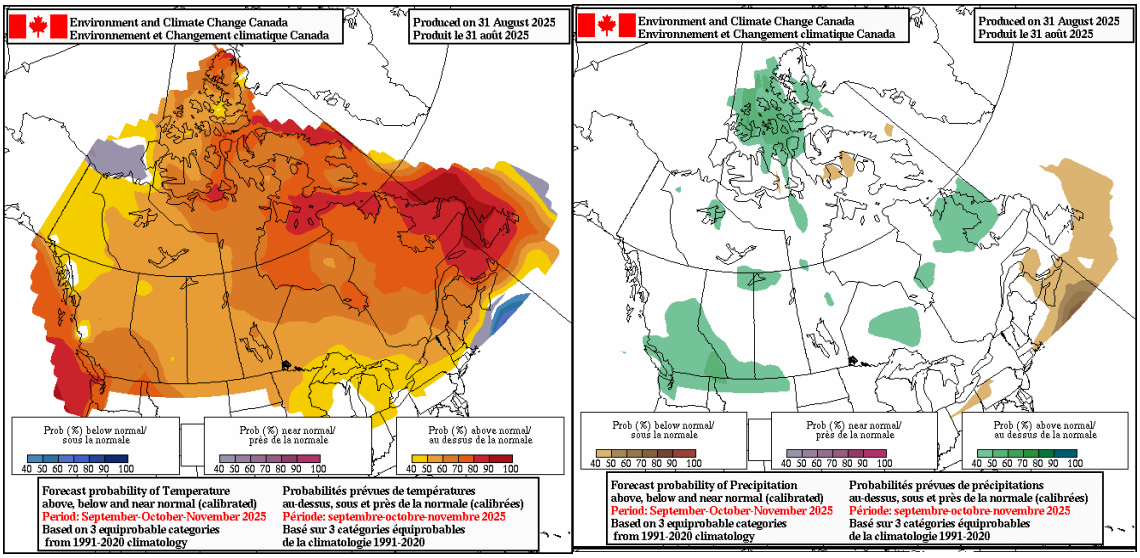


Figure 4: *Three-Month Seasonal Forecast from ECCC[1] (Sep-Nov).*

[1] ECCC Seasonal forecasts. https://climate-scenarios.canada.ca/?page=cansips-prob (Accessed 29.09.2025)

Hydrology

Streamflow was variable across the valley, but many systems are low, and water temperatures are warm. Flows are low in many unregulated streams that are important for fish spawning. Okanagan Lake levels are low for this time of year, in part due to the early freshet this spring and likely because of the low precipitation over the summer (Figure 5). Water supplies vary across the valley, with many reservoirs around normal, but many unregulated systems remain low, especially in the south. Warm waters are creating thermal barriers that make fish passage difficult. As a note, the Similkameen River remains alarmingly low, and the Nicola is also experiencing extremely low flows.

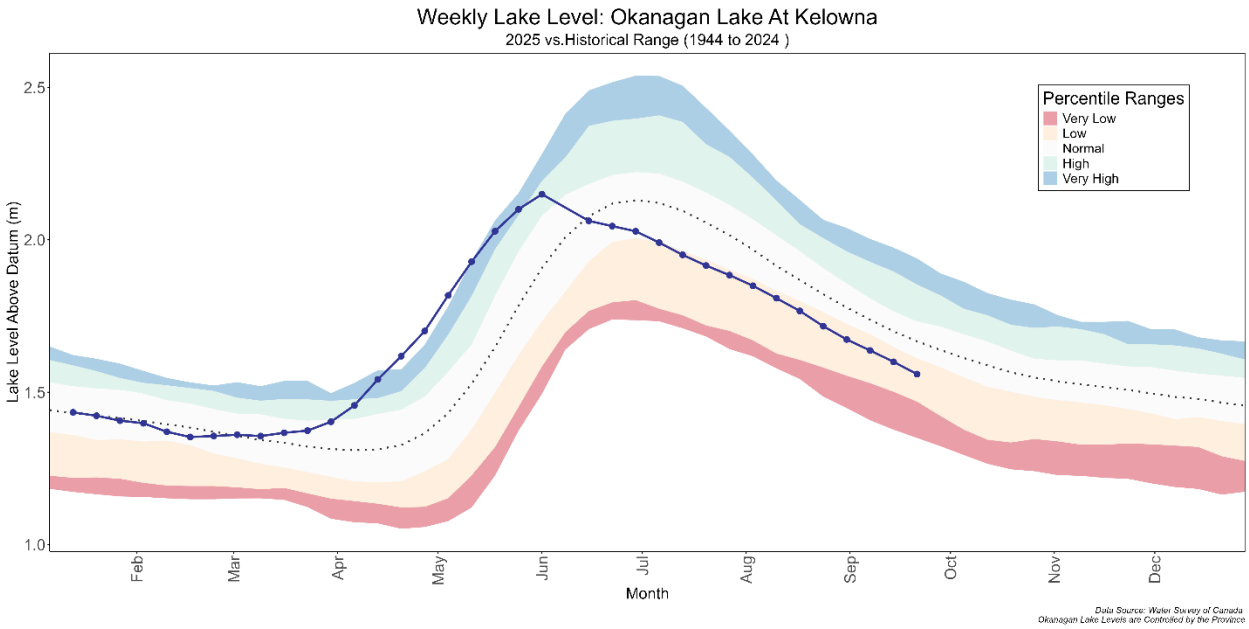


Figure 5: Weekly lake levels for Okanagan Lake at Kelowna compared to the 1944 – 2023 range as of Sept. 28, 2025. Data was retrieved from the Water Survey of Canada.