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MEMORANDUM

To: OBWB Directors

From: Sandra Schira, Water Science Specialist

Date: Aug. 25, 2025

Subject: Weather Update

Okanagan Basin Water Board

Regular meeting Sep. 5, 2025 Agenda No: 7.4

Temperature

August temperatures were variable but generally warmer than normal compared to the 1991-2020 average. The first week of August was very warm, with average temperatures for that week sitting between 23°C and 24°C across the Okanagan (Figure 1). Temperatures returned closer to normal conditions for the rest of August but were still slightly warm.

Precipitation

As of Aug. 25, the monthly precipitation for August was within the normal range but below the 1991-2020 average (Figure 2). By August, most cities in the Okanagan had received about 200 mm of precipitation. So far this year, only Kelowna was close to the normal value; conversely, the weather stations in Vernon (at Coldstream Ranch) and Penticton had both received less total precipitation than normal. Since precipitation varies significantly by location, it is essential to consider local conditions and consult local water suppliers and experts to understand the current conditions in your area.

The Okanagan experienced sufficient rainfall in late August to lower the Provincial drought level to 0 during the week of August 21, according to the province's new method for setting drought levels. However, despite the average improvement across the whole region, local conditions vary significantly across the valley. Many catchments are still experiencing significant drought impacts, including very warm water temperatures and low stream flows. Additionally, the new drought level rubric from the province is calibrated to reflect weekly conditions and is therefore likely to change from one week to the next. It is likely that with the warm weather forecast, the level will rise.

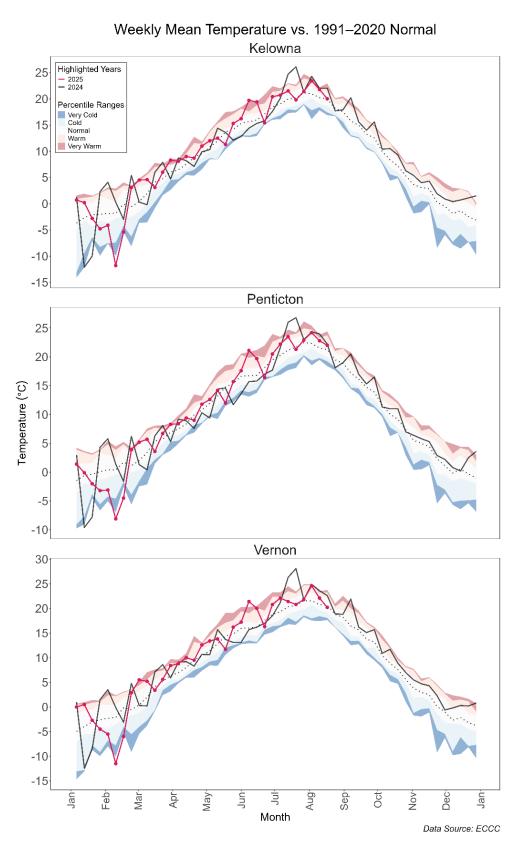


Figure 1: Weekly mean temperatures in the Okanagan as of Aug. 25, 2025 compared to 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada

2025 Monthly Precipitation vs. 1991–2020 Normal

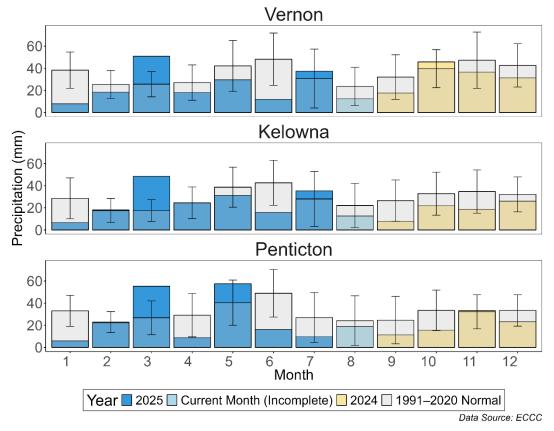
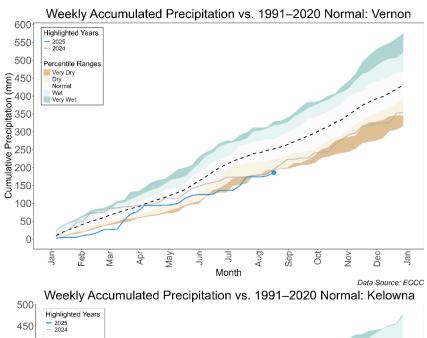
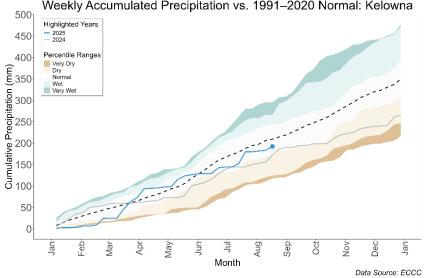


Figure 2: Monthly Precipitation in the Okanagan as of Aug. 25, 2025 compared to 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada

Seasonal forecasts indicate that August through October is likely to be warm. The Environment and Climate Change Canada¹ long-term seasonal forecast indicates a medium likelihood of above-normal temperatures in the Okanagan over the next three months. Precipitation forecasts show no clear trend for the Okanagan region during that period (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.

¹ ECCC Seasonal forecasts. https://climate-scenarios.canada.ca/?page=cansips-prob (Accessed 25.07.2025)





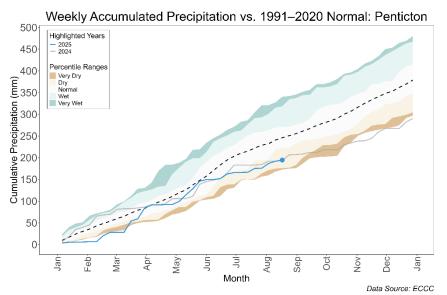


Figure 3: Cumulative weekly precipitation in the Okanagan as of Aug. 25, 2025 compared to the 1991 to 2020 range. Data retrieved from Environment and Climate Change Canada

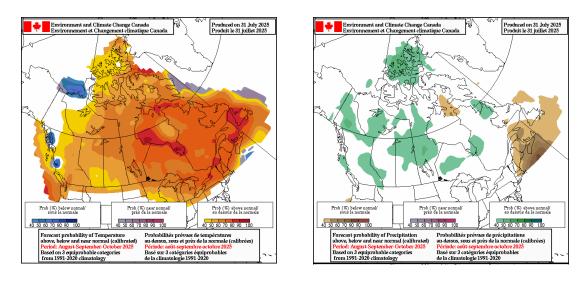


Figure 4: Three-Month Seasonal Forecast from ECCC1 (Aug-Oct).

Hydrology

Streamflow was variable across the valley, but many systems are low, and water temperatures are warm. Okanagan Lake levels are low for this time of year in part due to the early freshet seen this spring (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.

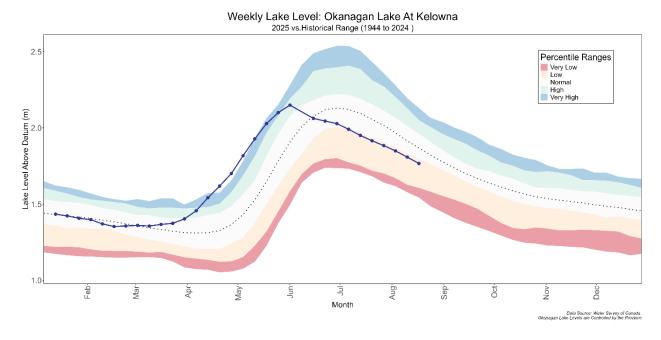


Figure 5: Weekly lake levels for Okanagan Lake at Kelowna compared to the 1944 – 2023 range as of Aug. 25, 2025. Data is retrieved from the Water Survey of Canada.