Regional Context & Current Drought Data

Okanagan Basin Water Board · Water Supplier Community of Practice

September 1, 2026

Live drought conditions: **www.okanaganwatersupply.com** and **temp.stream**

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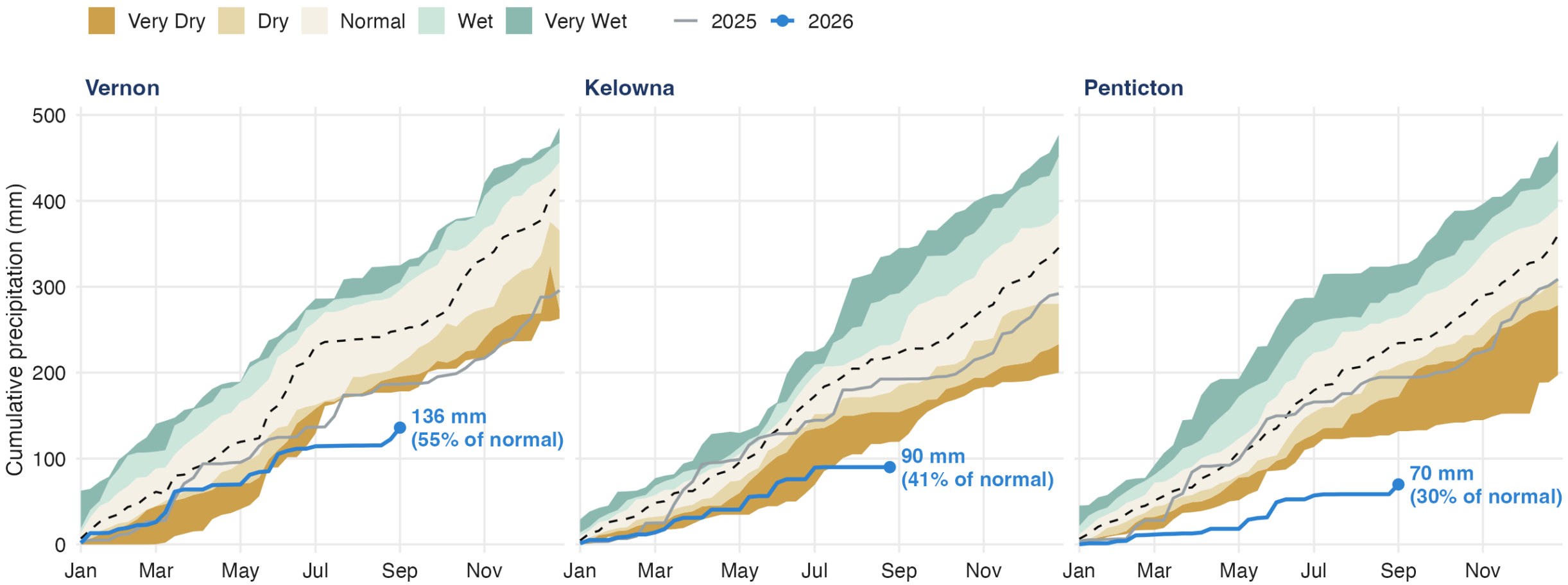
Okanagan Basin WATER BOARD

OBWB.CA

Cumulative Annual Precipitation

SLIDE UPDATED 01 Sep 2026



Source: Environment and Climate Change Canada daily climate stations via MSC GeoMet-OGC (TOTAL_PRECIPITATION); 1991–2020 normal · data to 2026-09-01

Data source: Environment and Climate Change Canada daily climate stations via the MSC GeoMet-OGC API (TOTAL_PRECIPITATION), against the 1991–2020 normal. Observed data only, no gap-filling; each panel stitches the current auto gauge to its co-located predecessor so the normal is built from the full period. Snapshot 2026-09-01 — calendar year-to-date as % of the normal to date: Vernon 55%, Kelowna 41%, Penticton 30%.

Stream Flows

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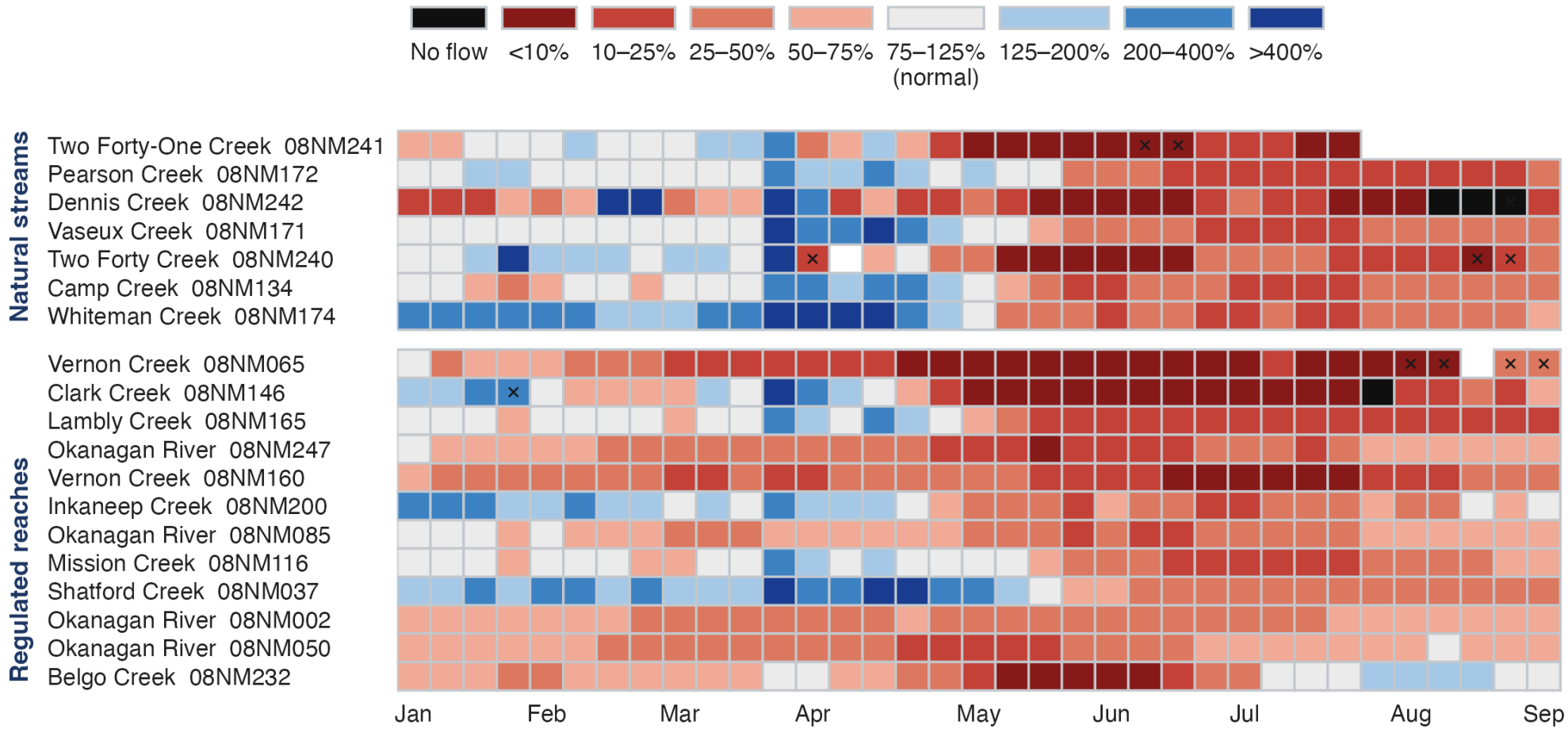

Source: Water Survey of Canada + BC provincial gauges, via ok-streamflow · data to 2026-09-01 · black = no flow recorded that week (a dry or disconnected channel), not a low percentage · × = week built on fewer than 4 days of record

Data source: Water Survey of Canada real-time gauge network + BC provincial gauges, via OBWB ok-streamflow. Weekly mean discharge as % of the day-of-year median. Snapshot 2026-09-01 — 16 of 18 reporting gauges below 75% of normal this week.

Stream Temperatures

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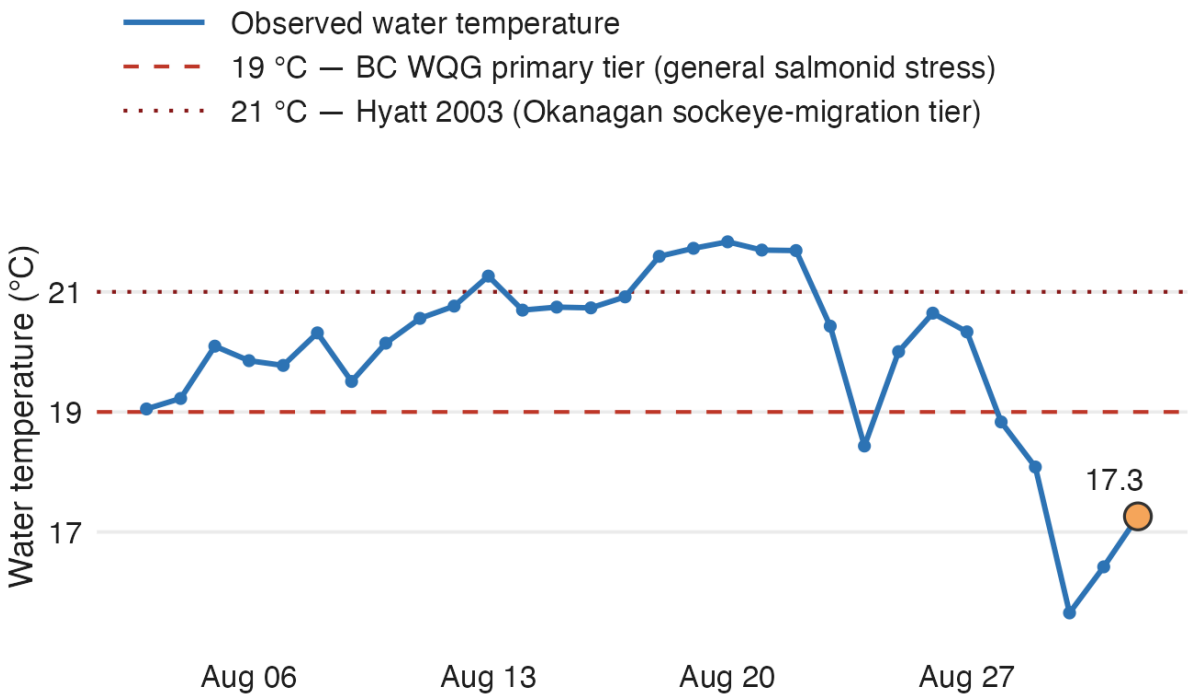
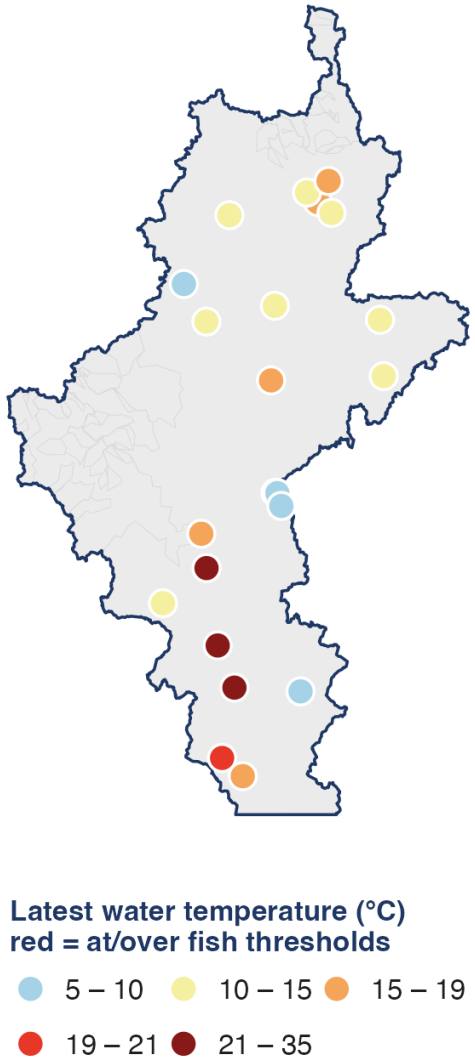
Water temperature, last 30 days

Mission Creek Near East Kelowna (08NM116)





Data source: Water Survey of Canada real-time water temperature, via OBWB ok-streamflow. Latest daily value; red = at/over fish thresholds (19 °C BC WQG, Oliver & Fidler 2001; 21 °C sockeye-migration, Hyatt et al. 2003). Snapshot 2026-09-01 — 4 of 22 gauges at or over 19 °C, basin maximum 21.9 °C.

Net Inflow to Okanagan Lake

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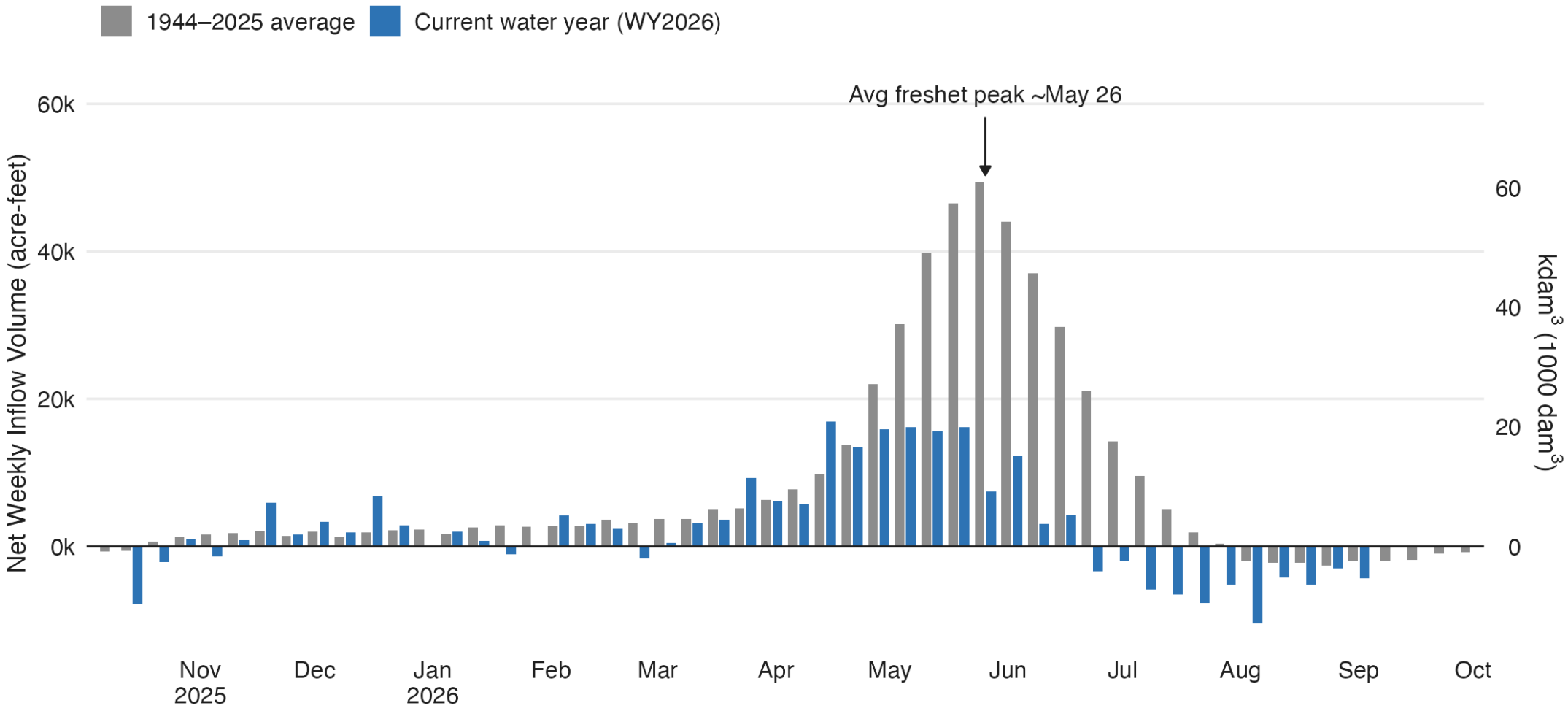

Source: okanaganwatersupply.com (ok-waterconditions), WSC/ECCC gauges 08NM083 + 08NM050 · data to 2026-09-01

Data source: okanaganwatersupply.com (OBWB ok-waterconditions), WSC/ECCC gauges 08NM083 + 08NM050. Weekly net inflow for the current water year against the 1944–2025 weekly average; evaporation excluded (operational convention). Snapshot 2026-09-01 — 47 observed weeks in WY2026.

Lake Levels

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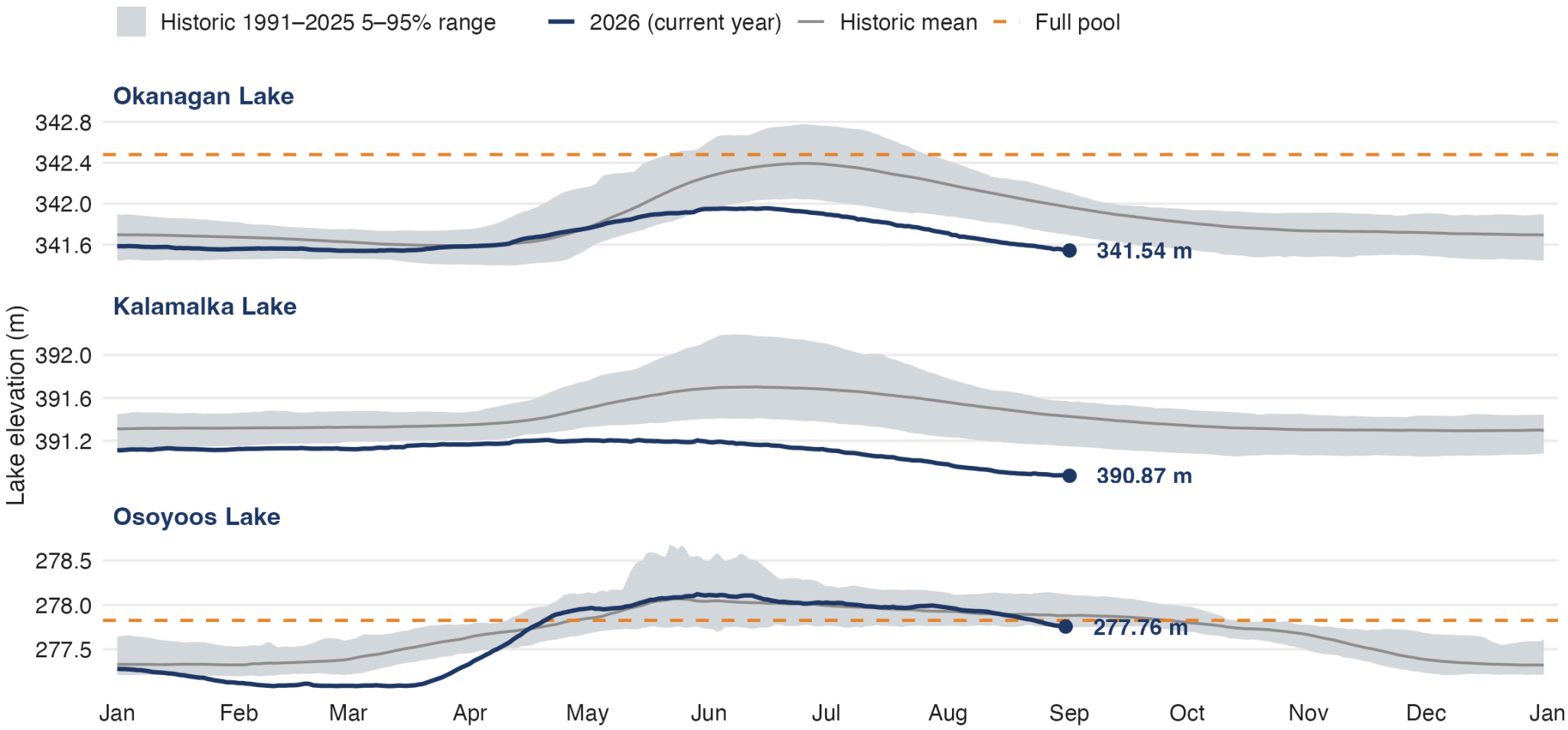

Source: Okanagan + Kalamalka: WSC wateroffice real-time (08NM083 / 08NM143), current year provisional, plus the OBWB mirror for history; Osoyoos: USGS 12439000 param 62614 · data to 2026-09-01

Data source: Okanagan & Kalamalka — WSC wateroffice real-time (08NM083 / 08NM143) for the current year, with the OBWB hydrometric mirror for the historic record; gauge height converted to GSC geodetic elevation using HYDAT station datum offsets. Osoyoos — USGS gauge 12439000 parameter 62614 (NGVD29, ft to m); the Canadian Osoyoos gauges are discontinued. Current-year values are provisional (not yet HYDAT-approved). Envelope = 1991–2025 5–95%. Osoyoos full pool = IJC normal-year max 911.5 ft; the drought-year max is 913 ft and in 2026 Osoyoos is held high under the IJC drought rule, so sitting above the normal-year line is expected operation. Kalamalka has no verified full pool, so none is drawn. Snapshot 2026-09-01 — Okanagan 341.54 m, Kalamalka 390.87 m, Osoyoos 277.76 m.

Groundwater

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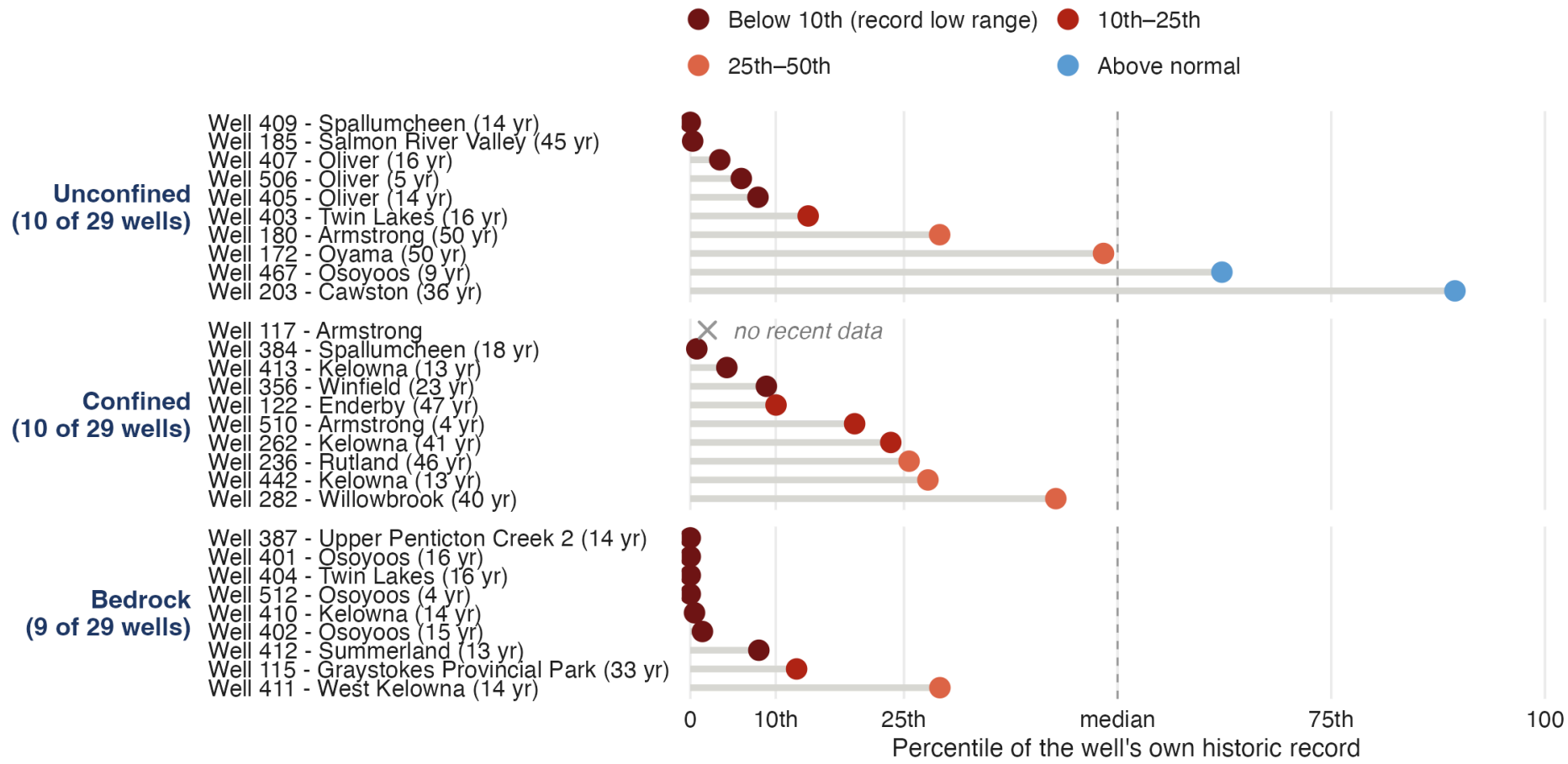

Source: BC Provincial Groundwater Observation Well Network (PGOWN) daily means; fixed 29-well roster and aquifer class per the WSCOP reporting standard. Years in brackets = how many years of the same season stand behind that well's percentile; a well with only a few is weakly constrained, and one commissioned during this drought has only dry years to compare against, so it cannot read as dry · data to 2026-09-01

Data source: BC Provincial Groundwater Observation Well Network (PGOWN) daily means, pulled live. Fixed well roster (the first report's 25, plus four added 2026-08-04) so the panel is comparable between editions; a roster well with no recent data is shown and labelled rather than dropped. Percentile is against each well's own day-of-year record, classified with ok.gw's production classifier. Snapshot 2026-09-01 — 26 of 29 reporting wells below their median, 15 in the record-low range (below the 10th percentile).

Forecast

MODEL OUTPUT — NOT OBSERVED DATA

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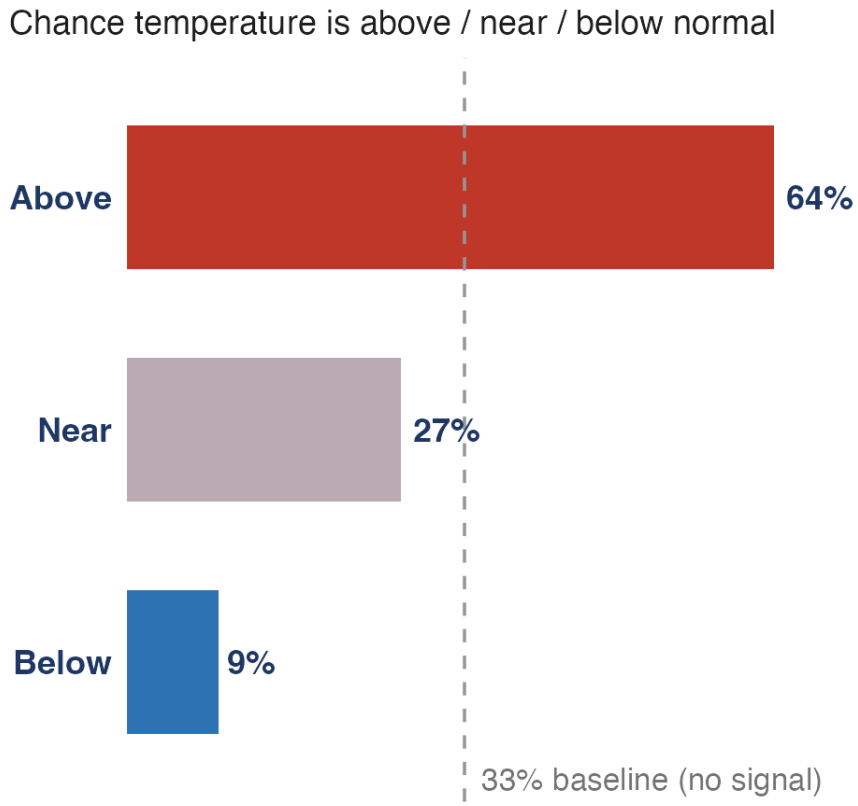
Seasonal Temperature Outlook — Okanagan Basin

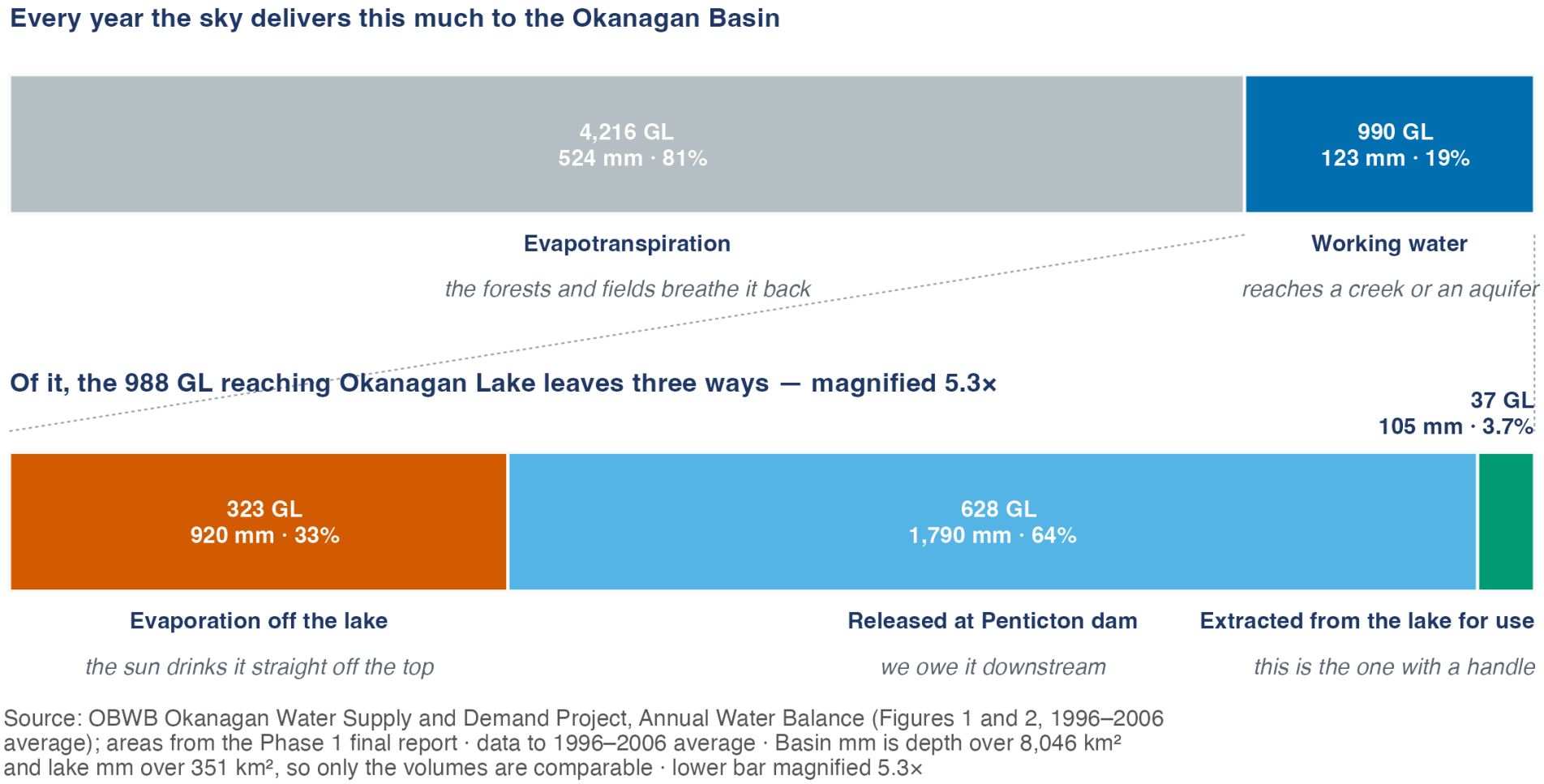
September–October–November 2026 · 64% chance warmer than normal



Source: Environment and Climate Change Canada, CanSIPS 100 km seasonal forecast, issued September 2026 (MSC datamart), vs the model's own climatology; mean of the 4 grid cells over the basin · data to 2026-09-01 · MODEL OUTPUT, NOT OBSERVED DATA — the only forecast in this brief

Data source: Environment and Climate Change Canada, CanSIPS 100 km calibrated seasonal forecast, issued September 2026, taken from the MSC datamart (the filename states the issue month and the three-month lead, so the valid period is read rather than assumed). Mean of the grid cells over the basin. **Model output, not observed data** — the single flagged exception to this brief's observed-only rule. September–October–November 2026: 64% chance above normal, 27% near, 9% below, against a 33% no-signal baseline.

Where the water actually goes



Source: OBWB Okanagan Water Supply and Demand Project, Annual Water Balance (Figures 1 and 2, 1996–2006 average); areas from the Phase 1 final report · data to 1996–2006 average · Basin mm is depth over 8,046 km² and lake mm over 351 km², so only the volumes are comparable · lower bar magnified 5.3×

Data source: Okanagan Basin Water Board, Okanagan Water Supply and Demand Project — Annual Water Balance, Figure 1 "Average Annual Water Balance for the Basin" and Figure 2 "Average Annual Water Balance for Okanagan Lake"; annual totals averaged over 1996–2006. Basin and lake areas from the Phase 1 final report (basin 8,046 km^2, the Canadian portion above the outlet of Osoyoos Lake; Okanagan Lake 351 km^2). **This slide is the long-run structure of the system, not this year** — the slides above carry current condition. Both published balances close exactly (647 − 524 = 123 = 45 + 78 mm; lake inflow 2,815 = outflow 2,815 mm) and the two stages reconcile to 0.16%, which is what allows the lower bar to be drawn as a magnification of the upper one. Note that "extracted from the lake" is extraction from Okanagan Lake only; basin-wide human use is 27 mm over the basin (about 217 GL from all sources), so most Okanagan water use is not taken from the lake. Of all precipitation on the basin, the share extracted from the lake for use is 0.71%.

Water temperature, week by week

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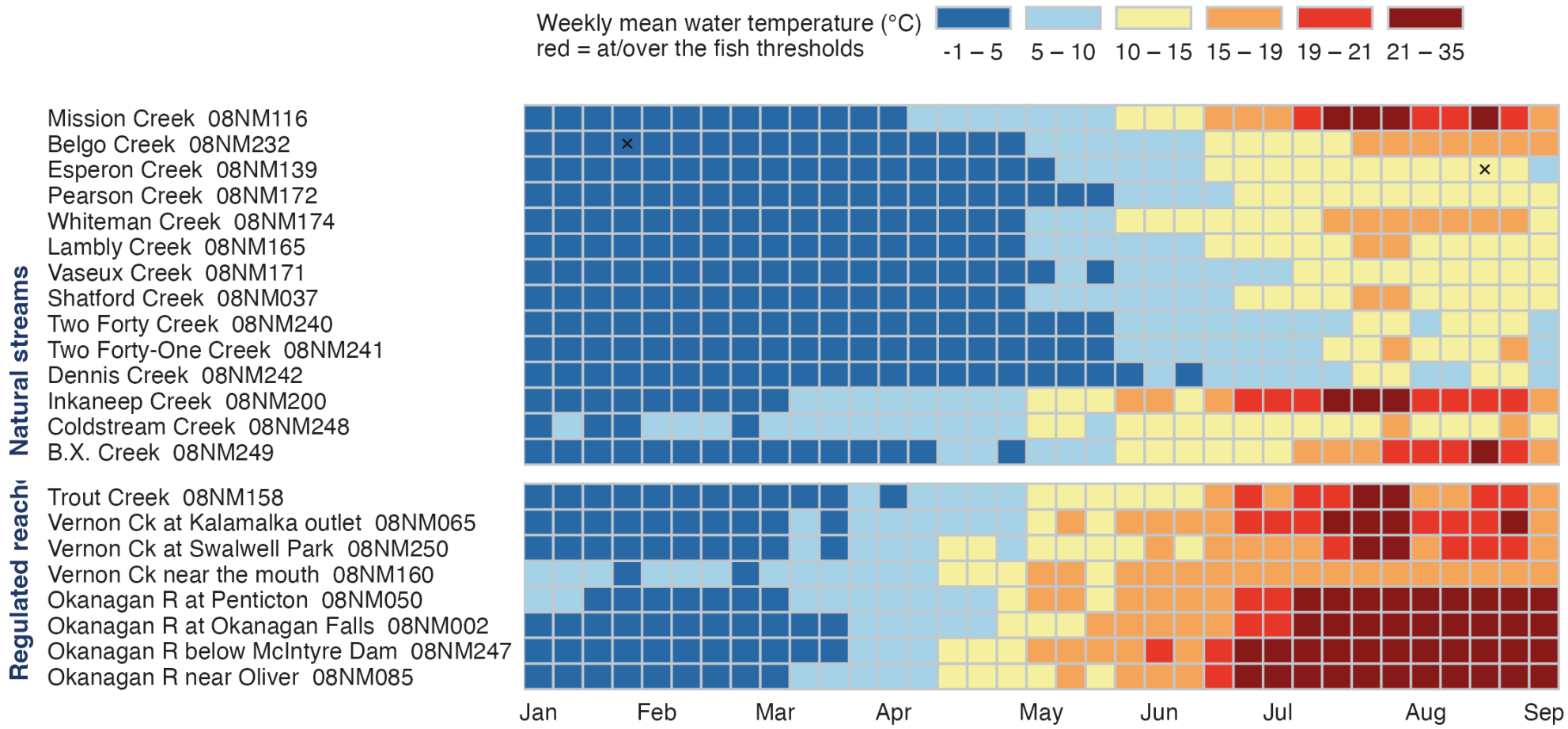
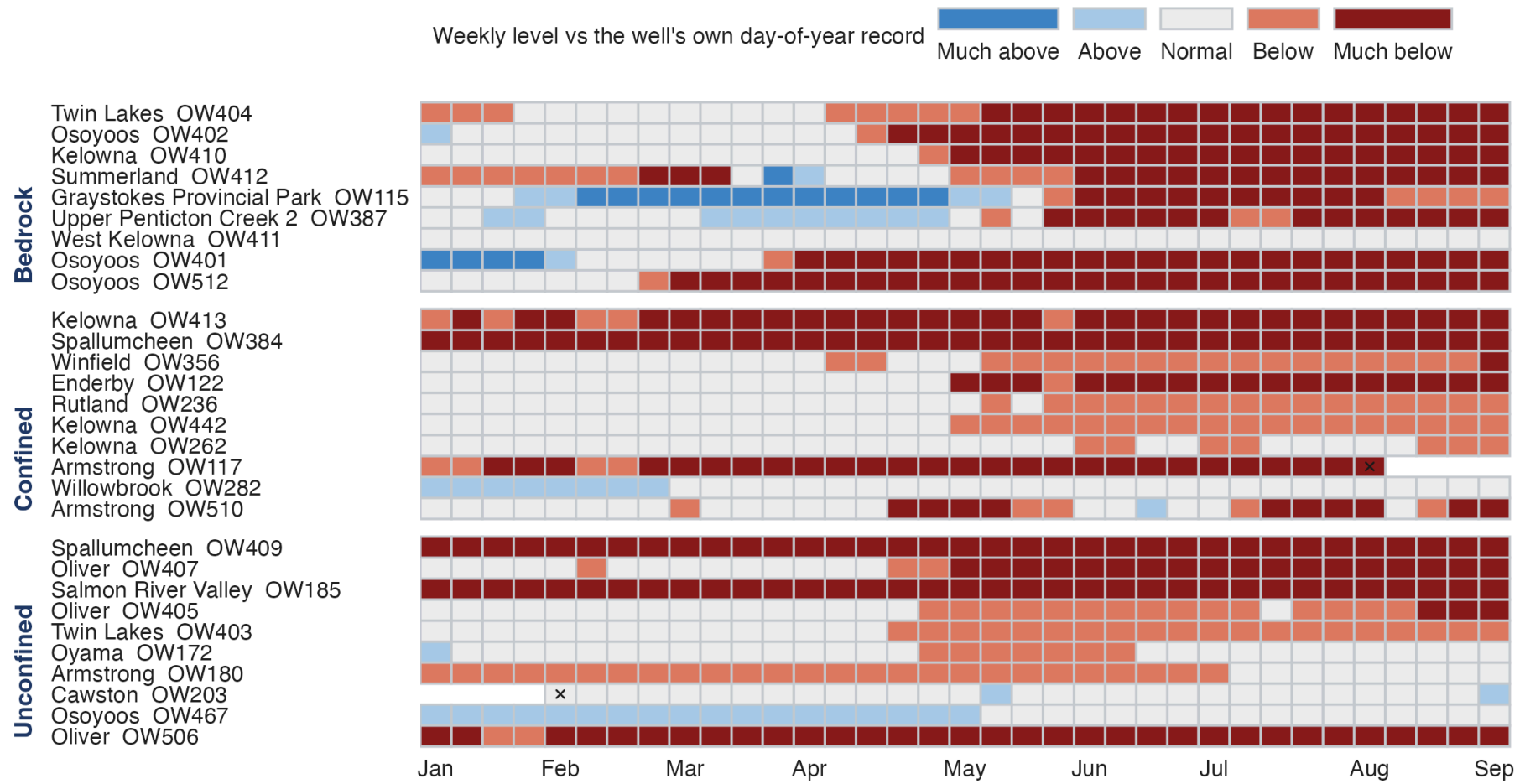


Source: Water Survey of Canada + OBWB hydrometric gauges, via ok-streamflow · data to 2026-09-01 · weekly means; thresholds 19 °C salmonid stress, 21 °C sockeye migration · × = week built on fewer than 4 days of record

Data source: Water Survey of Canada and OBWB hydrometric gauges via ok-streamflow. Weekly MEAN water temperature, not the weekly maximum: a single afternoon spike would paint a whole week red on a grid whose sibling slides are weekly means. Bands are the deck's verified tiers — 19°C general salmonid stress (BC WQG; Oliver & Fidler 2001) and 21°C Okanagan sockeye migration (Hyatt et al. 2003). Fixed roster of 21 gauges so editions stay comparable; a gauge with no recent data is drawn and labelled, never dropped, and a week built on fewer than four days carries a cross. Snapshot 2026-09-01 — 4 gauge(s) at or over 19°C this week, 93 station-weeks at or over 19°C so far this year.

Groundwater, week by week

SLIDE UPDATED 01 Sep 2026



Source: BC Provincial Groundwater Observation Well Network daily means; classified with ok.gw's production classifier · data to 2026-09-01 · reference is each well's own ±7-day day-of-year record from prior years · × = week built on fewer than 4 days of record

Data source: BC Provincial Groundwater Observation Well Network daily means, classified with ok.gw's production classifier so the app, the site and this deck cannot disagree about what a band means. Each well-week is scored against that well's OWN ±7-day day-of-year record from PRIOR years — the current year is excluded, or a drought year would help set the reference it is judged against and read less extreme than it is. Deliberately not percent-of-normal: a water table is a depth below ground, so a bigger number is a deeper, worse table. Snapshot 2026-09-01 — 17 of 28 roster wells much below normal this week, 389 well-weeks much below normal so far this year.