January 2025

January was unusually cool, with persistent southerly winds and cooler sea surface temperatures keeping air temperatures below average day and night. Daytime temperatures were 2.6°C below the January norm - not exactly ideal for summer holidays!

Northern Hawke's Bay was wet again and rainfall late in the month helped bolster low totals on the plains and in the ranges. This resulted in 102% of the average January rainfall falling across the whole region.

River flows were mostly below average except for two sites in the north and groundwater levels have returned to normal. Soil moisture levels at most sites are near normal for the time of year.

Water quality at the beaches was excellent during January, while some river and estuary sites suffered from the rainfall.

Jeremy Kidd

Air Quality Scientist

Short summary

Normal rainfall, and cool!

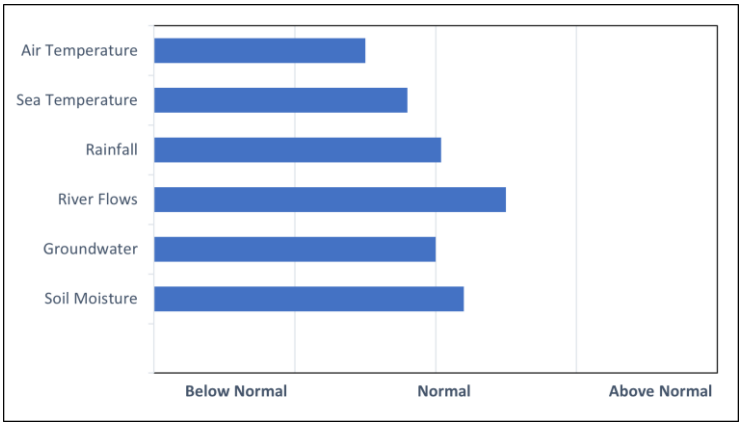
February to April Forecast

Temperature	Near or above average
Rain	Near or above average
River flows	Near or above average
Soil moisture	Near or above average

For more information

www.hbrc.govt.nz

Ph: 06 835 9200



RAINFALL

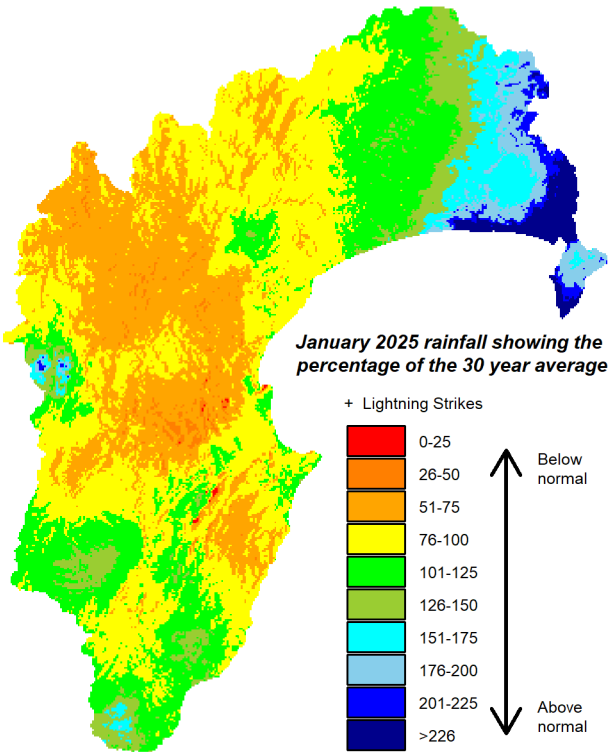
Normal. Zero cloud to ground lightning strikes.

Lightning counts come from the Blitzortung.org lightning network to which HBRC contributes.

Percentage of normal January rainfall *(30 year average)* for areas in the region:

Waikaremoana	94%
Northern HB	148%
Tangoio	90%
Kaweka	92%
Ruahine	106%
Heretaunga Plains	82%
Ruataniwha Plains	100%
Southern HB	108%
Hawke's Bay Region	102%

For a more detailed rainfall report click here and for a five-year monthly summary click here.



AIR TEMPERATURES

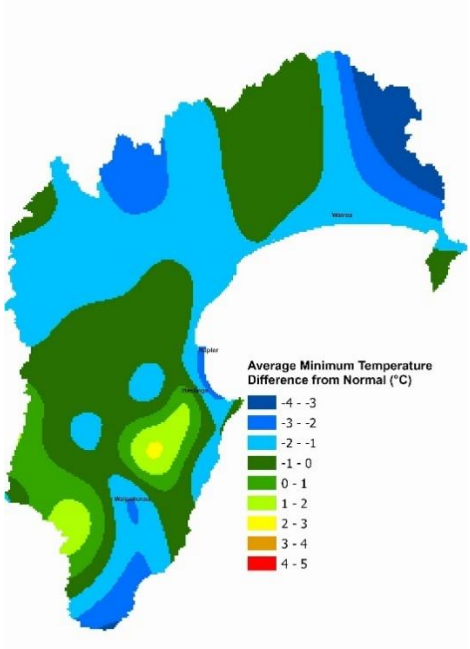
Temperatures – Cool days and nights.

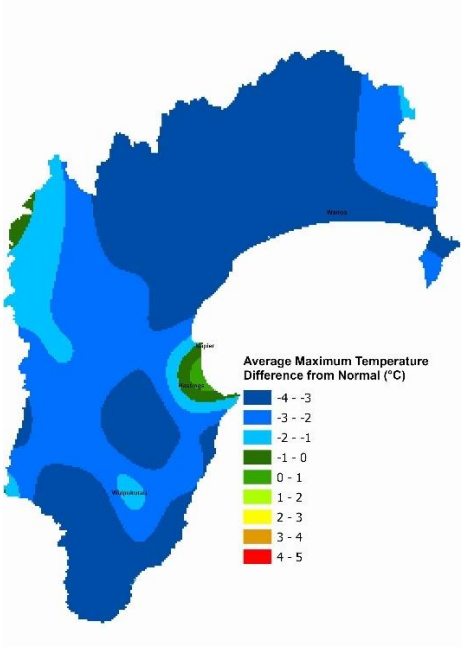
Mean Difference from Normal
Maximum Temperature: -2.6C
Minimum Temperature: -0.8°C

Mean Daily Maximum: 20.1°C
Mean Daily Minimum: 11.2°C

Highest Daily: 31.6 °C
Location: Whakatu EWS (NIWA)

Lowest Daily: 0.7 °C
Location: Taharua Climate



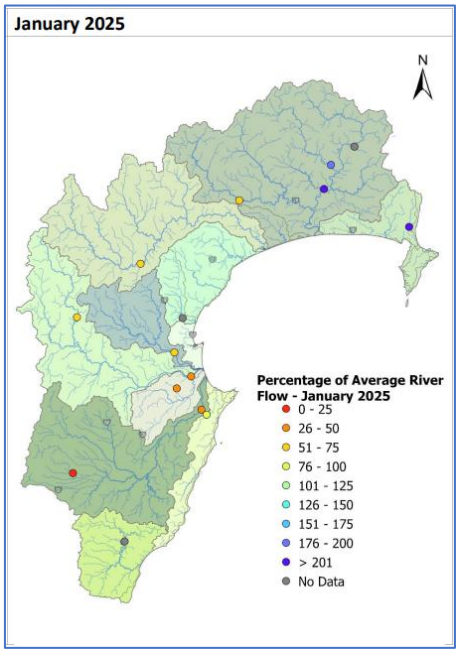


RIVER FLOW

Percentage of average January flows for areas in the region:

Northern Coast – Mahia	572%
Northern HB – Hangaroa River	No Data
Northern HB – Wairoa River	275%
Northern HB – Waiau River	63%
Mohaka	50%
Esk-Central Coast	No Data
Tūtaekuri	59%
Karamu	42%
Ngaruroro – Chesterhope	49%
Southern Coast	79%
Tukituki – Tukipo River	24%
Tukituki – Red Bridge	47%
Porangahau	No Data
Hawke's Bay Region	**125%**

For a more detailed river flow report click here.

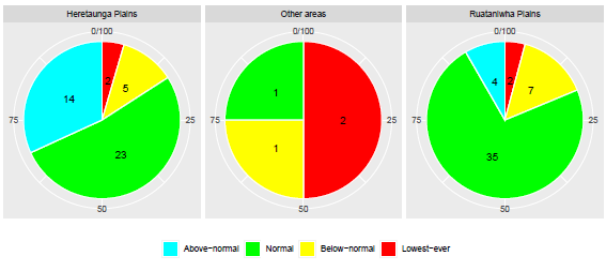


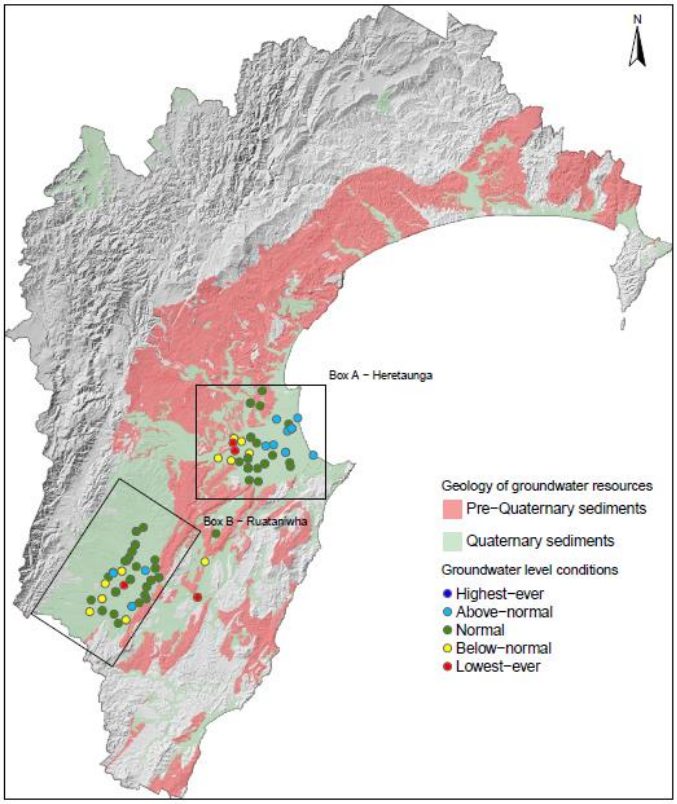
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near or above normal.
For a more detailed soil moisture report click here.

Current state of Groundwater levels:
This report compares groundwater levels in January with historic readings to evaluate current conditions. To assess these conditions, we have grouped groundwater levels at each well relative to their monthly percentiles.

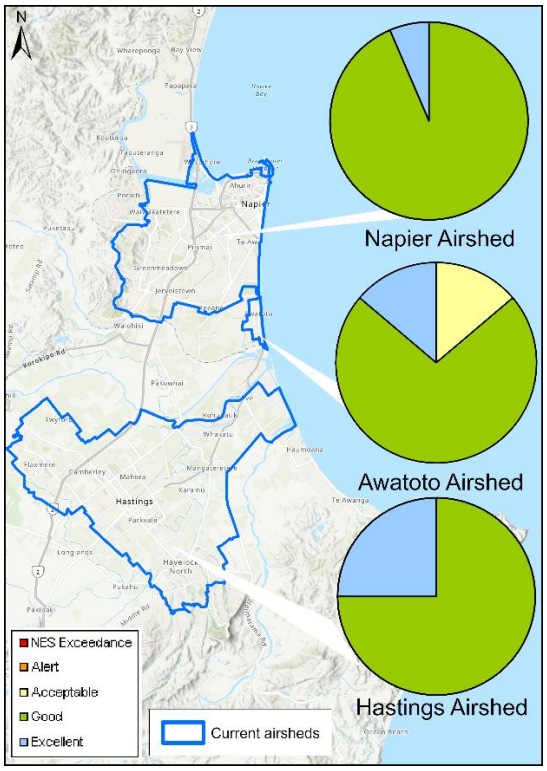
Groundwater levels measuring between their monthly minimum and 25th percentile are considered below-normal, groundwater levels measuring between the 25th and 75th percentiles are classed as normal, and groundwater levels measuring between the 75th-maximum are considered above-normal. Wells with less than 5 years of record are excluded from the analysis.





AIR QUALITY

Air Quality: No exceedances.
Figure 1: PM_{10} levels in the Napier, Hastings and Awatoto airsheds during January 2025.



PM_{10} exceedances:

The National Environmental Standard (NES) for particulate matter (PM_{10}) of 50 micrograms per cubic metre (24-hour average) was not exceeded in the Awatoto, Napier or Hastings airsheds during January 2025.

The monitoring sites are located at:

- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.
- Waitangi Road in the Awatoto airshed.

Further information is available at www.hbrc.govt.nz

For a more detailed air quality report click here.

RECREATIONAL WATER QUALITY

A few of our river and estuarine sites saw a couple of exceedances in January, while our beaches held the fort for the month with 100% compliance at nearly every beach site. A good start to 2025, despite some wet weather.

SEA SURFACE TEMPERATURE

The average sea surface temperature (SST) for Hawke's Bay in January 2025 was 19.4°C. This was 0.67°C lower than the long term average for this month*.

This data was collected from the HBRC coastal water quality monitoring buoy HAWQi which has been located 4km off the coast of Whirinaki since December 2012.

**Note that long term data has experienced some patchiness due to the challenges of electronic devices interacting with salt water and servicing requirements so the long term average in this instance only includes 11 prior January's.*

LONGER FORECAST

The anticipated La Niña has stumbled across the line to be a reality. It is likely to be weak, brief and unusual, with the area of cooling in the equatorial Pacific Ocean occurring centrally rather than in the east. Sea temperatures around Hawke's Bay have cooled too but remain strongly warmer to the east of us and to the west of the South Island and across the Coral Sea.

While the seasonal forecast models aren't in total harmony, the general picture is a pattern of higher-than-normal pressure over southern New Zealand and, later in the period, extending further north over eastern areas. Lower than normal pressure is expected northwest and north of New Zealand. We could see more winds having an easterly component in that pattern. Temperatures are forecast to be warmer than usual and the result of the onshore wind flow is the likelihood of rainfall being near or above average. I'm off on holiday so I much prefer the word "near" rather than above.

Dr Kathleen Kozyniak

Team Leader Air and Land Science