



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

JUNE 2024



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

JUNE 2024

June was a tough one. The region had 187% of average June rainfall. Most of this rain fell over two weeks—mid-month and towards the end of June. Waikaremoana, Tangoio, and the Heretaunga Plains received over 200% of their average rainfall. The Ruahine was the only area to fall within what is considered the normal range (within 20% of its average).

Like last month, the soils eagerly absorbed the rain, and soil moisture levels were near or above normal levels for June. Groundwater levels were within the normal range, while river flows were above normal throughout the region.

Day and night temperatures were both a degree above average for June. While my morning rides were certainly more enjoyable this month, Hastings set a new national temperature record for June at a whopping 25.7°C. June was a good month for air quality, with no exceedances of PM10 recorded at any of our sites.

Dr. Nariefa Abraham-Bennet
Senior Climate Scientist

SUMMARY June 2024

Short summary – Warm and wet.

July to September Forecast

Temperature Near or above average

Rain Near normal

River flows Near normal

Soil moisture Near normal

source : NIWA

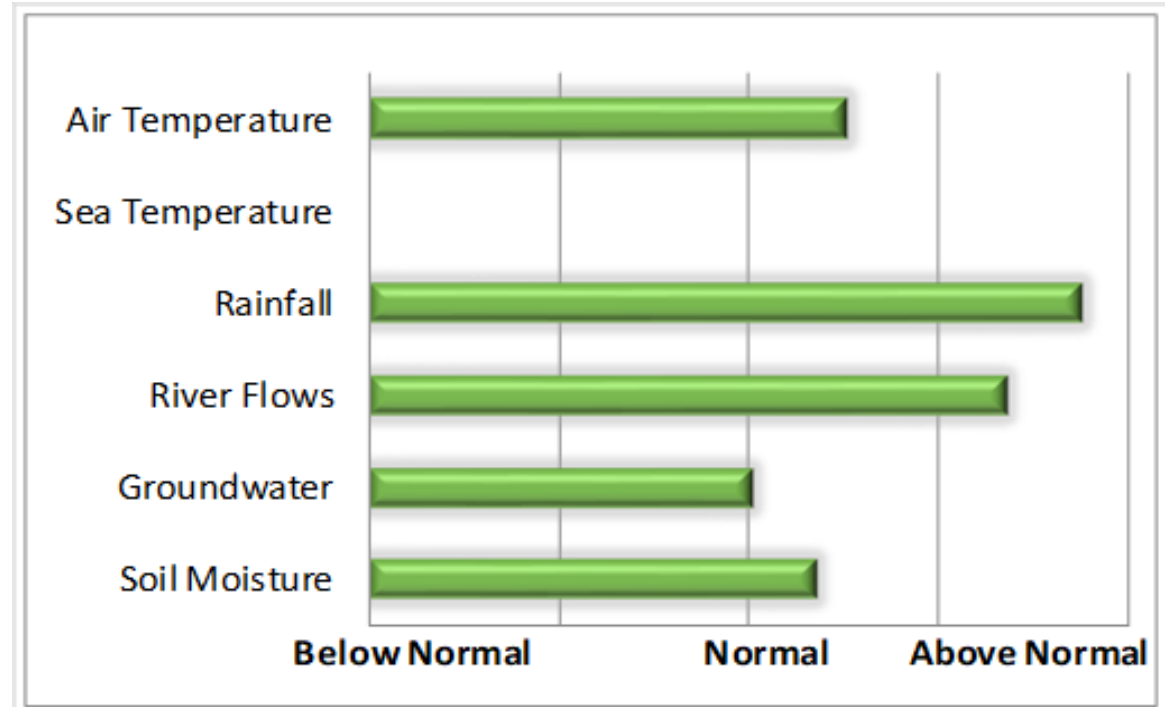
Sea Surface Temperature

The average sea surface temperature (SST) for Hawke's Bay in June 2024 is unavailable due to the HBRC coastal water quality monitoring buoy HAWQi being removed for servicing.

For more information

www.hbrc.govt.nz

Ph: 06 835 9200



RAINFALL

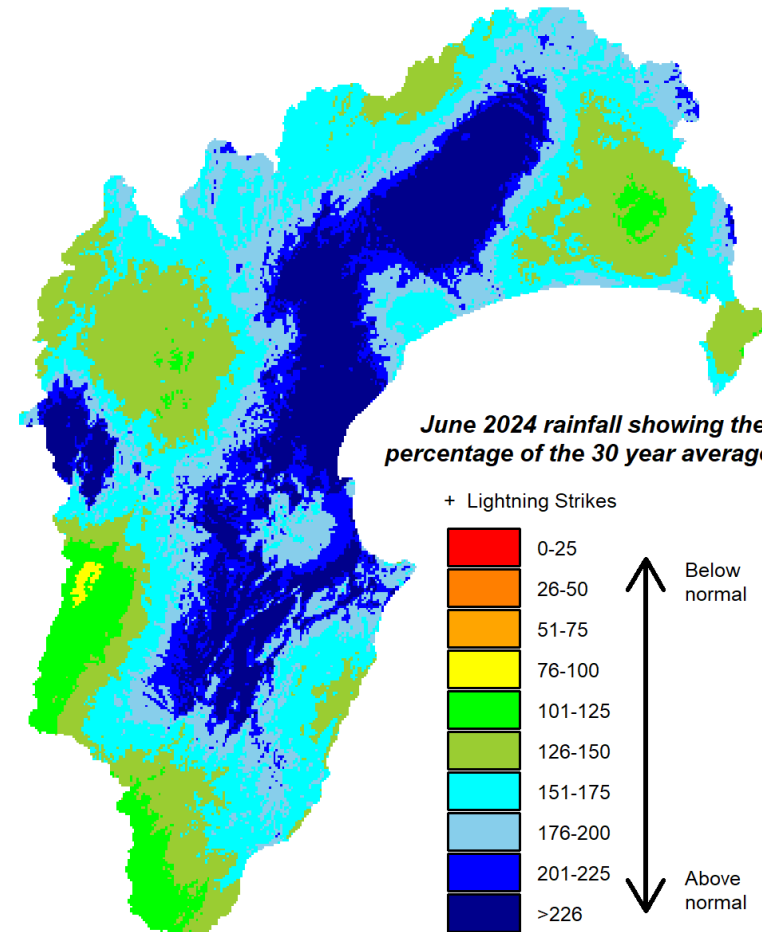
Above normal. No cloud to ground lightning strikes.
Lightning counts come from the Blitzortung.org lightning network to which HBRC contributes.

Percentage of normal June rainfall
(30 year average)

For areas in the region:

Waikaremoana	232%
Northern HB	188%
Tangoio	224%
Kaweka	168%
Ruahine	110%
Heretaunga Plains	212%
Ruataniwha Plains	190%
Southern HB	172%
Hawke's Bay Region	187%

For a more detailed rainfall report click [here](#)
and for a five-year monthly summary click [here](#).



AIR TEMPERATURES

Temperatures – Warm days and nights.

Mean Difference from Normal

Maximum Temperature: 1.1°C

Minimum Temperature: 1.3°C

Mean Daily Maximum: 13.8°C

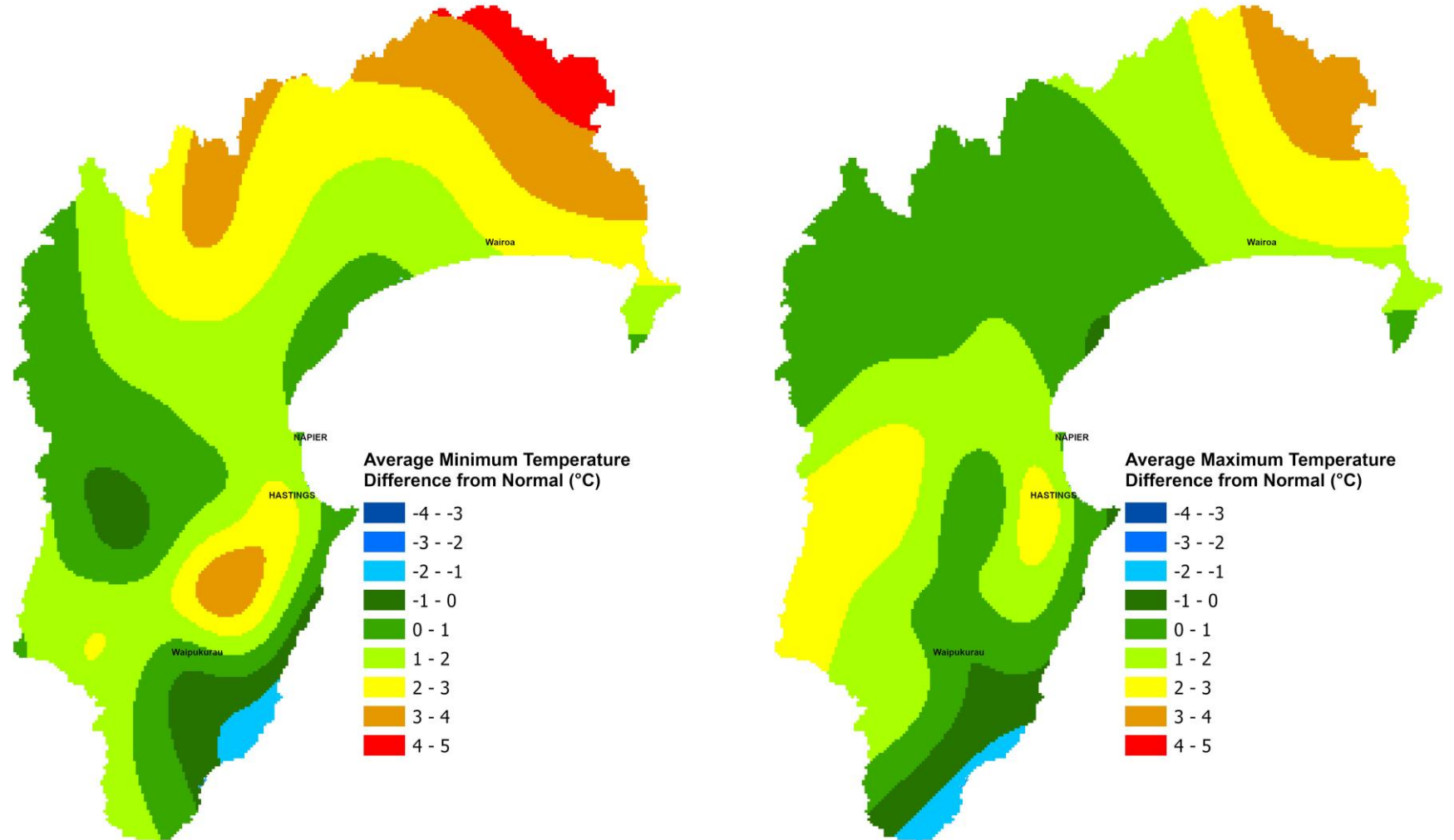
Mean Daily Minimum: 5.6°C

Highest Daily: 25.7 °C

Location: Hastings AWS (MetService)

Lowest Daily: -4.0 °C

Location: Taharua Climate

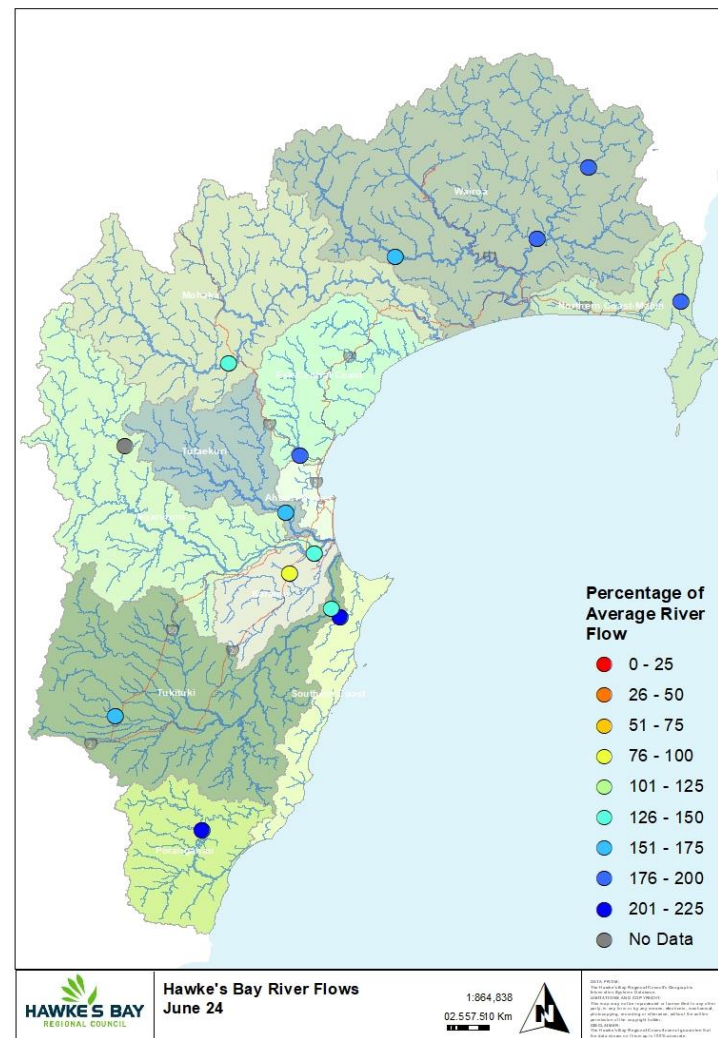


RIVER FLOW

Percentage of average June flows for areas in the region:

Northern Coast – Mahia	182%
Northern HB – Hangaroa River	180%
Northern HB – Wairoa River	181%
Northern HB – Waiau River	153%
Mohaka	143%
Esk-Central Coast	200%
Tūtaekuri	166%
Karamu	83%
Ngaruroro – Chesterhope	143%
Southern Coast	222%
Tukituki – Tukipo River	154%
Tukituki – Red Bridge	149%
Porangahau	223%
Hawke's Bay Region	167%

For a more detailed river flow report click [here](#).



GROUNDWATER & SOIL MOISTURE

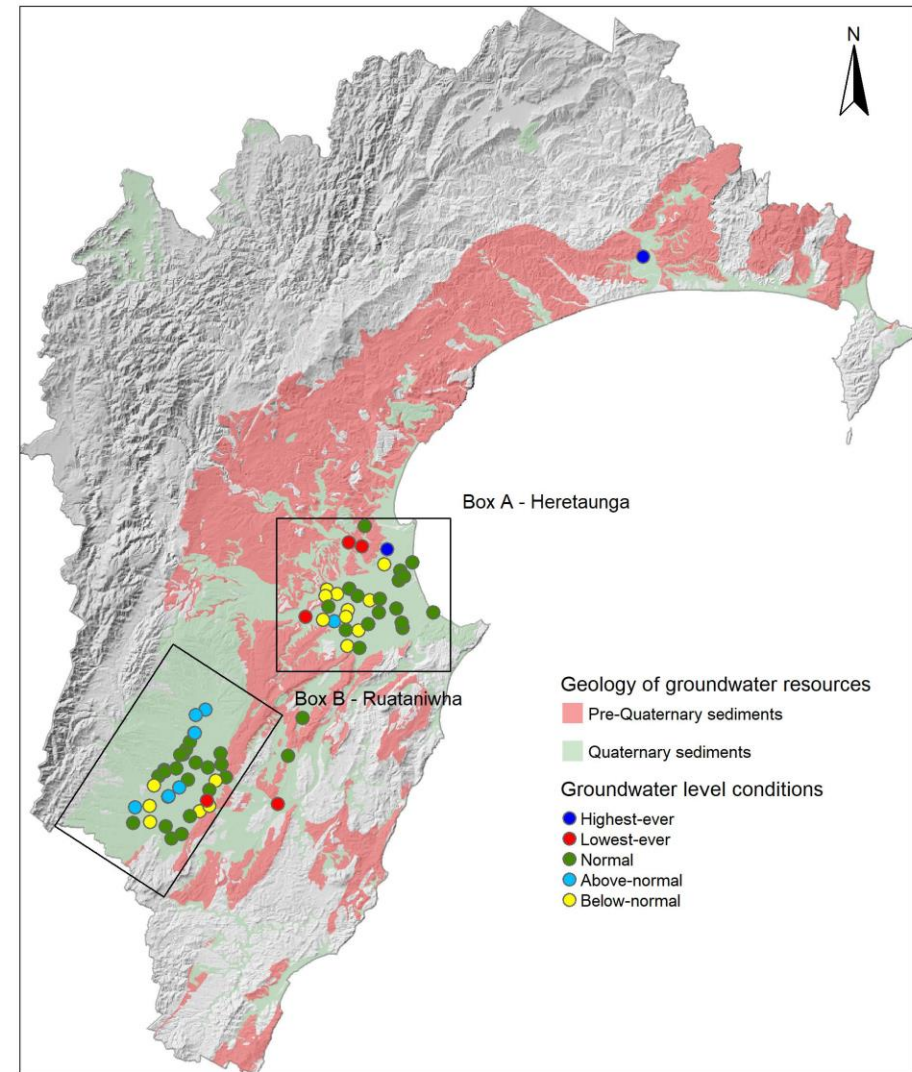
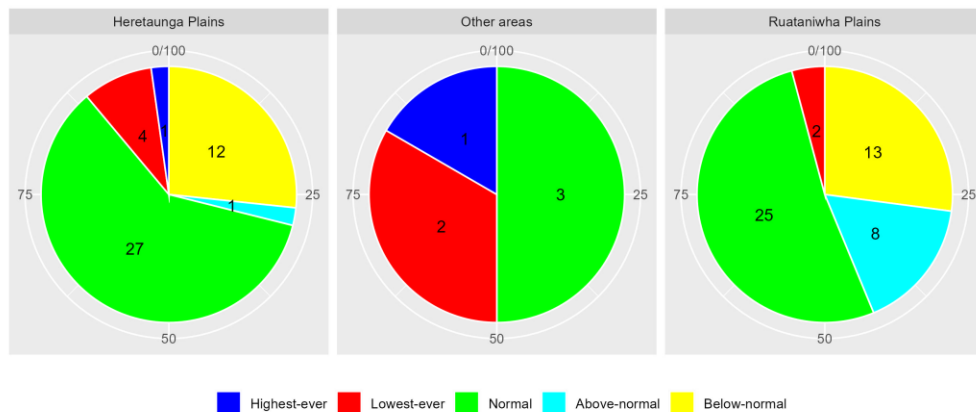
Soil Moisture: Near or above normal.

For a more detailed soil moisture report click [here](#).

Current state of Groundwater levels:

This report compares groundwater levels in June 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: PM₁₀ levels in the Napier, Hastings and Awatoto airsheds during June 2024.

PM₁₀ exceedances:

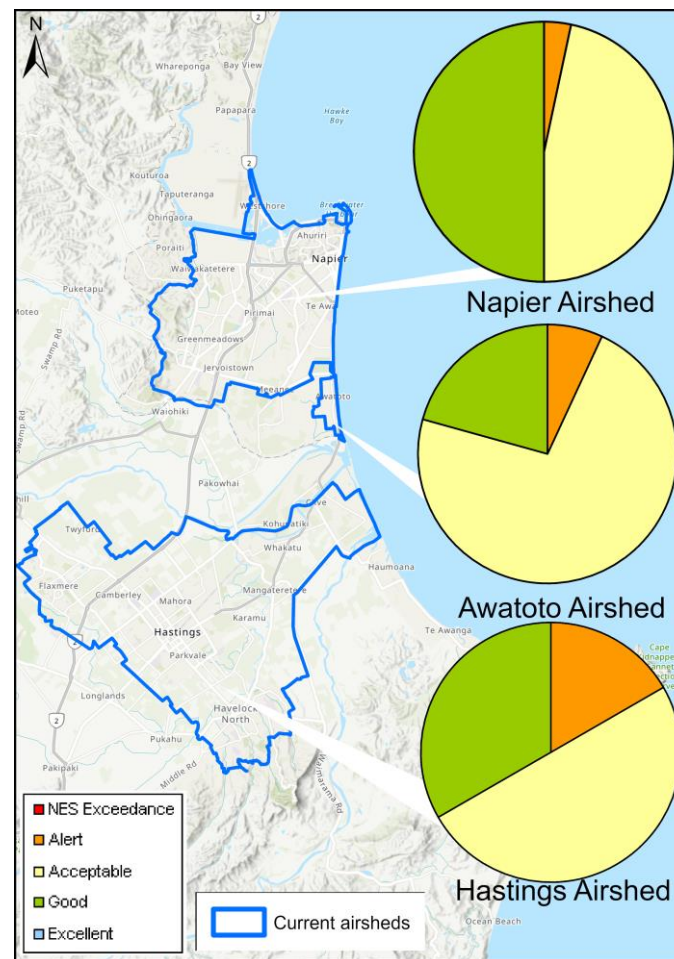
The National Environmental Standard (NES) for particulate matter (PM₁₀) of 50 micrograms per cubic metre (24 hour average) was not exceeded in the Awatoto, Napier or Hastings airsheds during June 2024.

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](#).



LONGER FORECAST

La Niña conditions look likely to develop this spring, though you'd think they're here already with the rain we've had in the last two months. The forecast models still opt for westerlies being predominant though, due to expected higher than normal pressure over New Zealand and lower pressure south of the country.

Sea temperatures near our region have been near average lately and forecasts indicate that will continue. As a result, our air temperatures could be near normal too, with a continued mix of the very mild and very chilly weather we've been experiencing. With the westerly bias predicted in the winds by the models, they favour near or below normal rainfall for the next three months but given the almost La Niña-like events we've been getting, near normal rainfall may be closer to the mark.

Dr Kathleen Kozyniak
Team Leader Air and Land Science