



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

July 2020


HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

July 2020

July's weather was wholly unremarkable. Hooray.

I'm tempted to stop there and save you a ramble but to flesh it out - temperatures were roughly normal, river flows mostly near normal, soil moisture near normal and groundwater playing catch up to normal but making inroads. Rainfall snuck into the near normal category, though admittedly the north was favoured more than the south, leaving the Plains and south coast light compared to July averages.

After months of being nowhere near normal, either too dry or suddenly very wet, it's wonderful to be normal and hopefully normal is the new normal.

You could say air quality was kind of normal, which in winter isn't a good thing. We toyed with a PM₁₀ exceedance in Hastings, having actually hit the limit. But a referral upstairs to goal line technology determined we were only 0.14 µg/m³ over the line rather than the required 0.5, so by the skin of our teeth we avoided officially calling it an own goal.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY July 2020

Pleasantly average.

*This is a summary of the regions rainfall, river flows, ground water, air quality and soil moisture levels.
Data and images provided by HBRC.*

August to October Forecast.

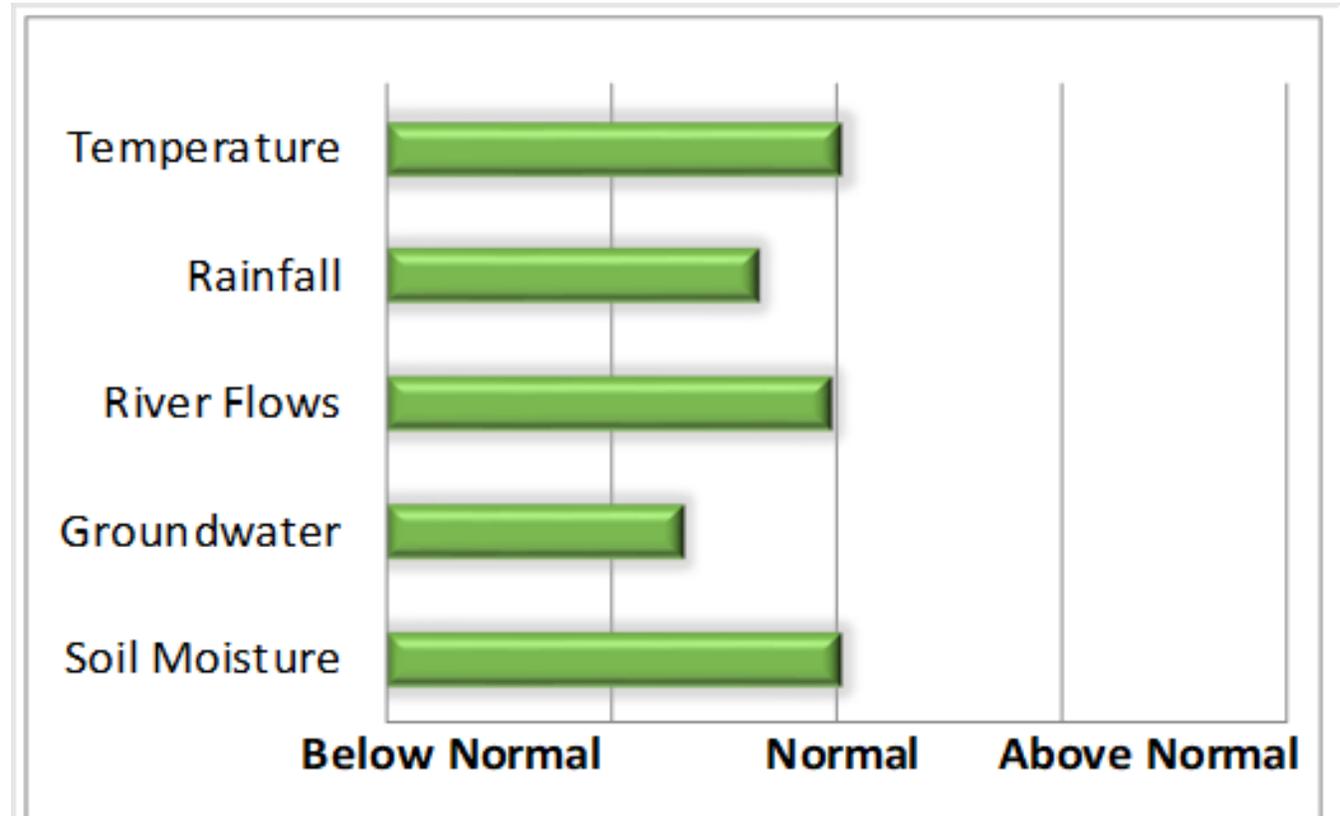
Temperature Near or above average
Rain Near normal
River flows Near normal
Soil moisture Near normal

source : NIWA

For more information

www.hbrc.govt.nz

P: 06 835 9200



RAINFALL

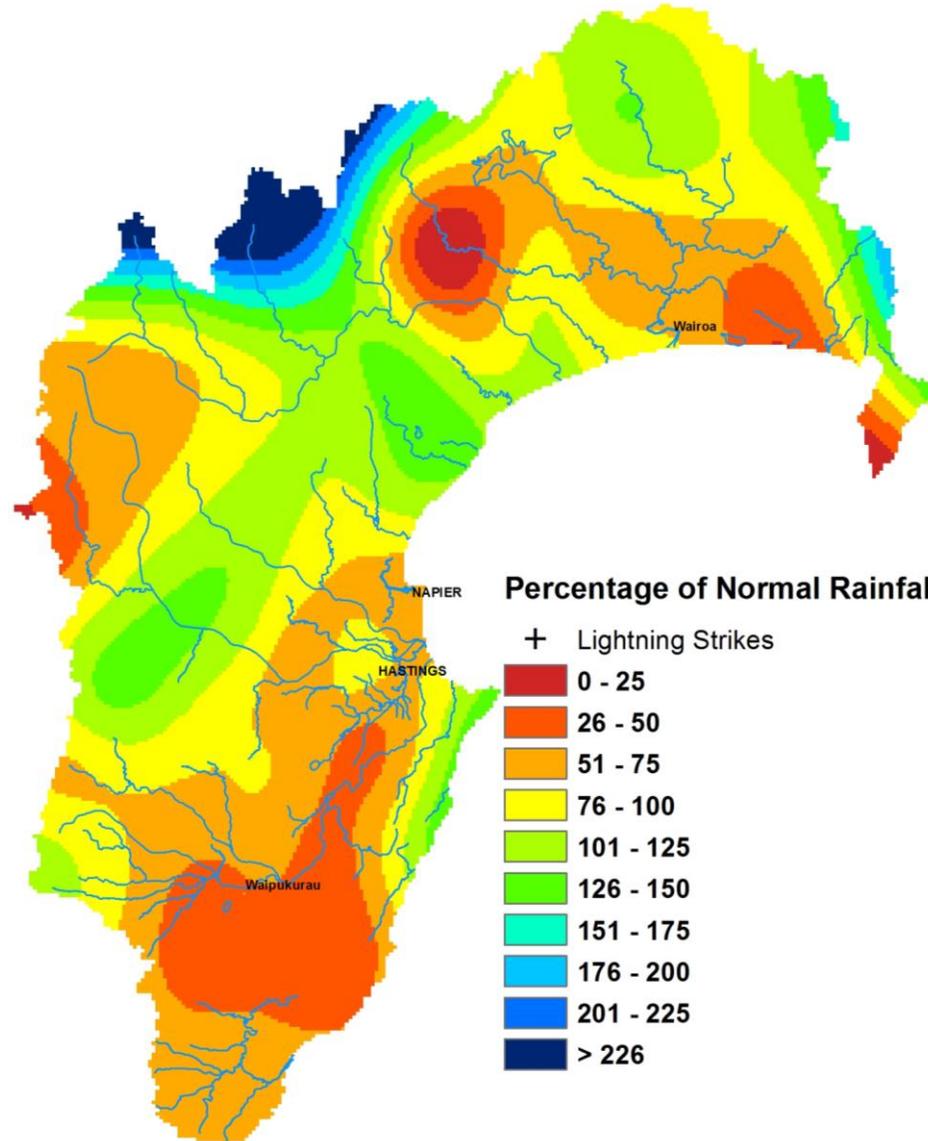
Normal in northern areas, below normal in the south. No cloud to ground lightning strikes.

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

Percentage of normal July rainfall
(30 year average)

For areas in the region:

Waikaremoana	90%
Northern HB	79%
Tangoio	112%
Kaweka	79%
Ruahine	98%
Heretaunga Plains	70%
Ruataniwha Plains	58%
Southern HB	66%
Hawke's Bay Region	82%



TEMPERATURES

Average.

Mean Difference from Normal

Maximum Temperature: 0.2 °C

Minimum Temperature: 0.4 °C

Mean Daily Maximum: 12 °C

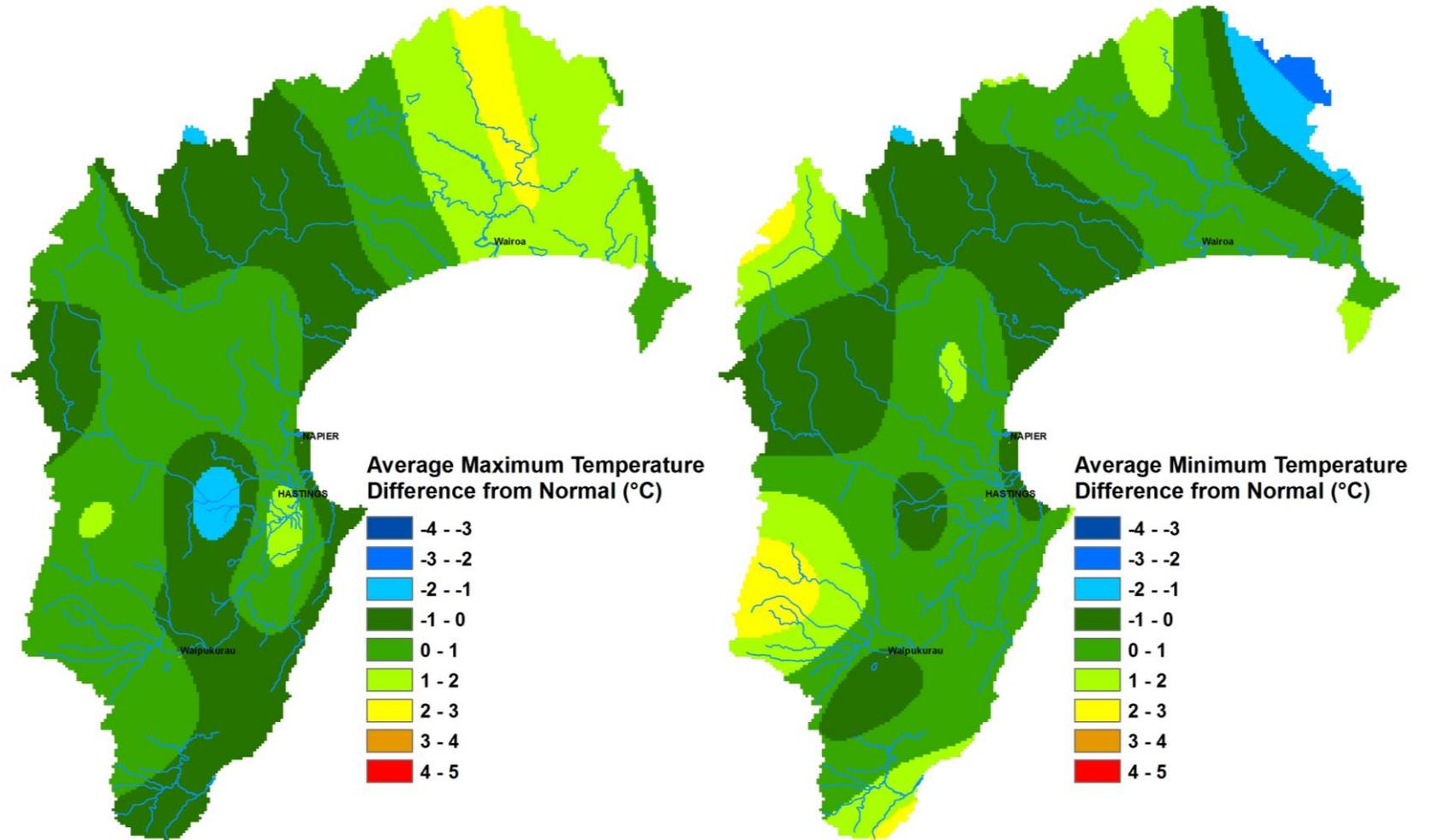
Mean Daily Minimum: 4 °C

Highest Daily: 20.6°C

Location: Whakatu EWS

Lowest Daily: -5.6 °C

Location: Whakatu EWS



GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near normal.

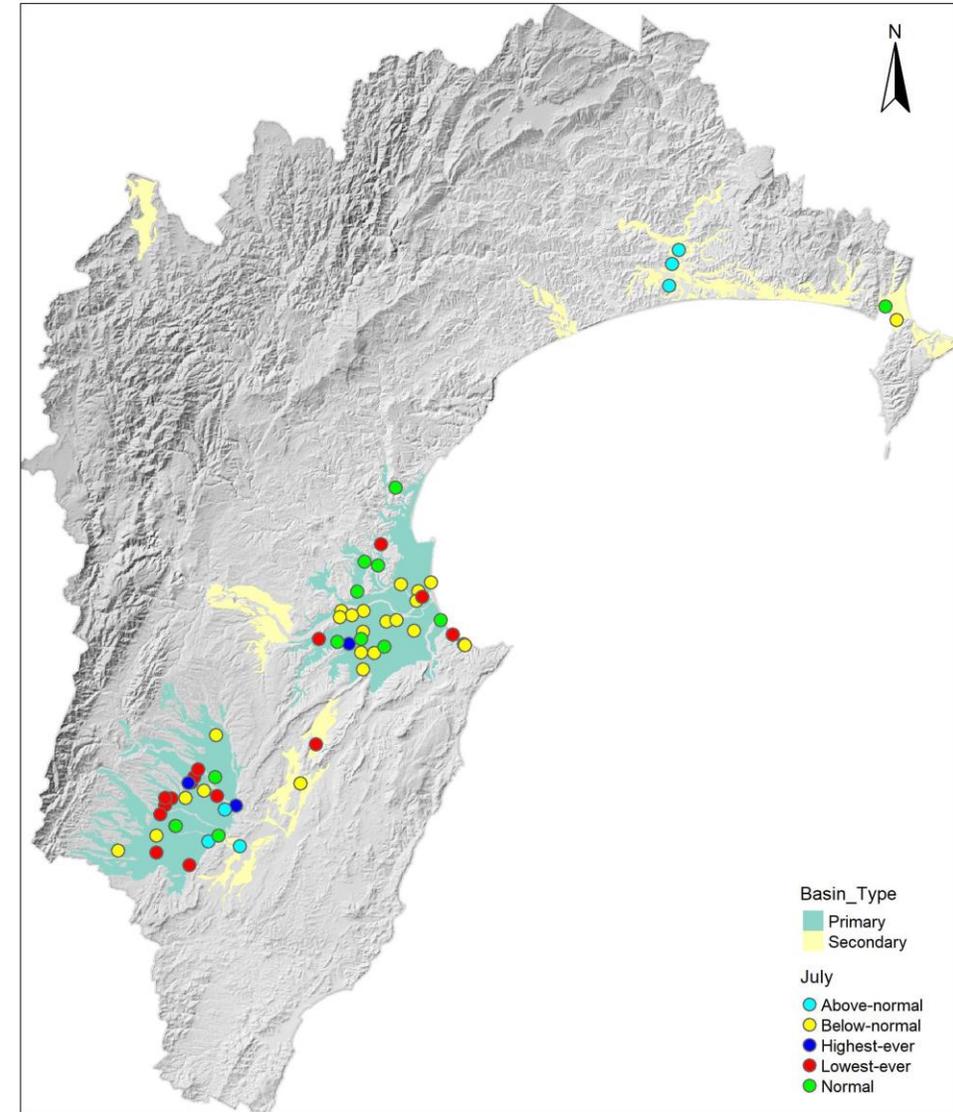
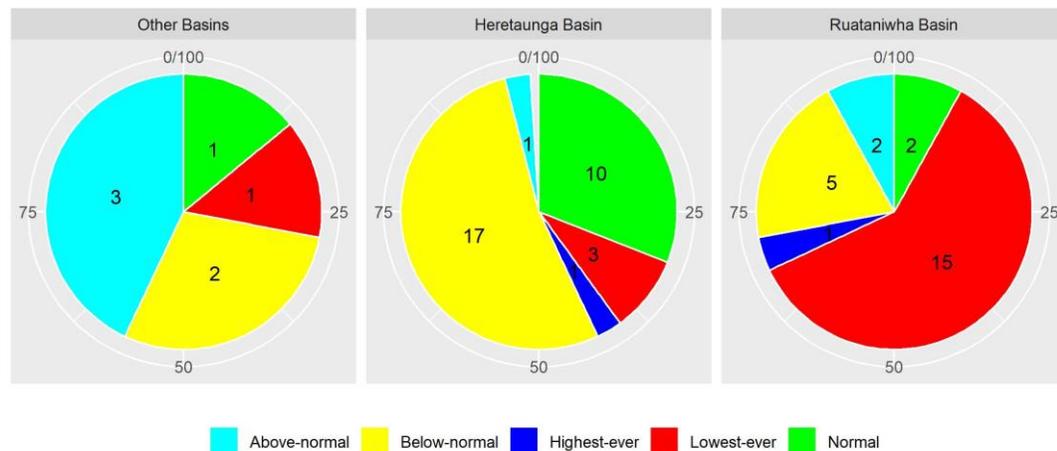
Current state of Groundwater levels:

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

Lucky. No official exceedances but right on the limit.

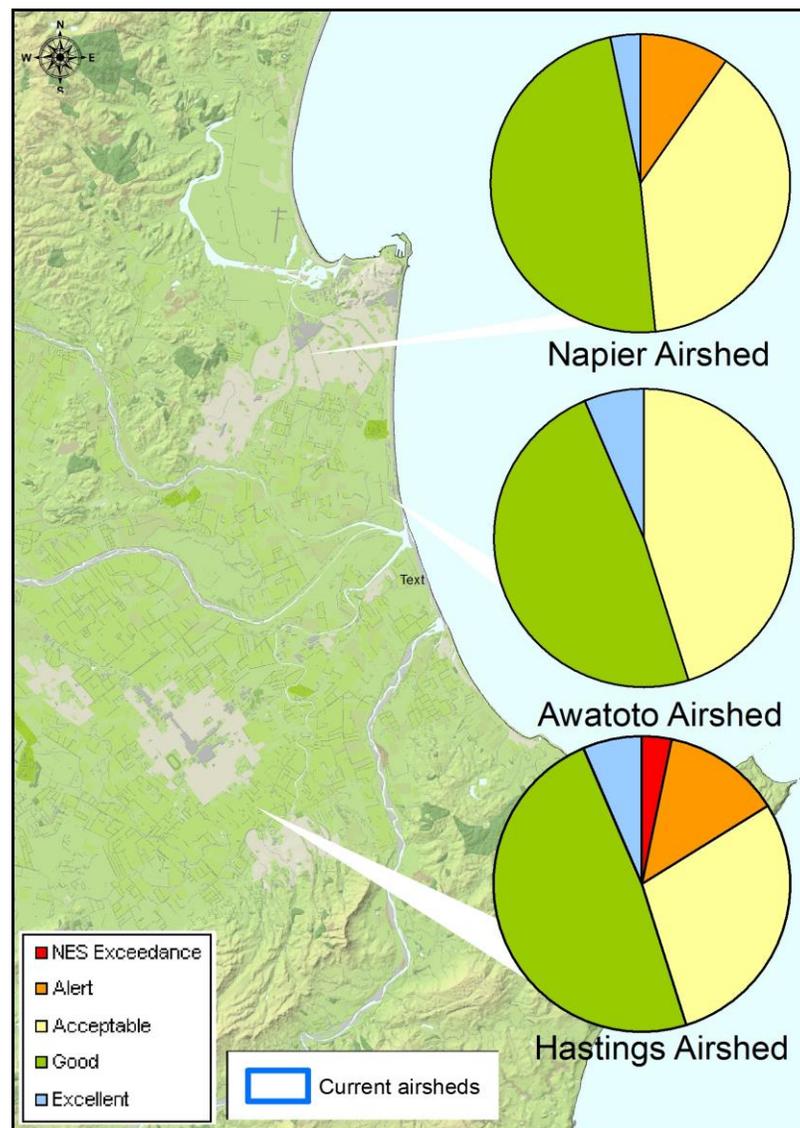
Figure 1: PM₁₀ levels in the Napier, Hastings and Awatoto airsheds during July 2020.

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 Napier, Hastings and Awatoto airsheds in July 2020.

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



LONGER FORECAST

Tricky. When all the seasonal forecast models, and there are a number of them, say similar things then it's easier to give an outlook, however wrong or right it might be. It's not the case for the three months ahead. Some want higher pressures over all New Zealand, particularly over the north. Some have normal pressures over the country and higher than normal to the south.

The general picture though is that the "normalness" of July might be the goer over the next three months in terms of both rainfall and temperature. There isn't a clear, dominant wind direction for August, suggesting we'll get a bit of everything, but easterlies might come to the fore in the two months after.

It's shades of La Niña, which the bookies still have as a very close two-way bet with neutral conditions. A La Niña would lower the chance of drier than normal conditions but an increase in onshore winds and potentially more clouds could put a dampener on my solar oven obsession.

Kathleen Kozyniak
Principal Scientist - Climate and Air