

August 2018

Hawke's Bay Trends

TEMPERATURES
RAINFALL
RIVER FLOW
GROUNDWATER & SOIL
LONGER FORECAST
AIR QUALITY

THE STATE OF OUR ENVIRONMENT

August 2018

A goldilocks August, with temperatures not too cold but pleasantly mild and rainfall that was right on (close enough to) 100% of the month's average. We needed it because groundwater levels, at the last measure, were a bit below the winter average. River levels are normal and soil moisture is still in good fettle. Robust slaps on the back all round because we had no air quality exceedances during the month, which meant we kept to the number of exceedances allowed by the national standards in Napier and Hastings. The three exceedances in Hastings this winter and one in Napier were all only a smidgen over the limit, so thanks to all those that have adopted clean heat – you are making a difference to everyone's health – and we need more of you to get us over, or more aptly, under the line.

Kathleen Kozyniak
Principal Scientist Climate and Air



The short summary

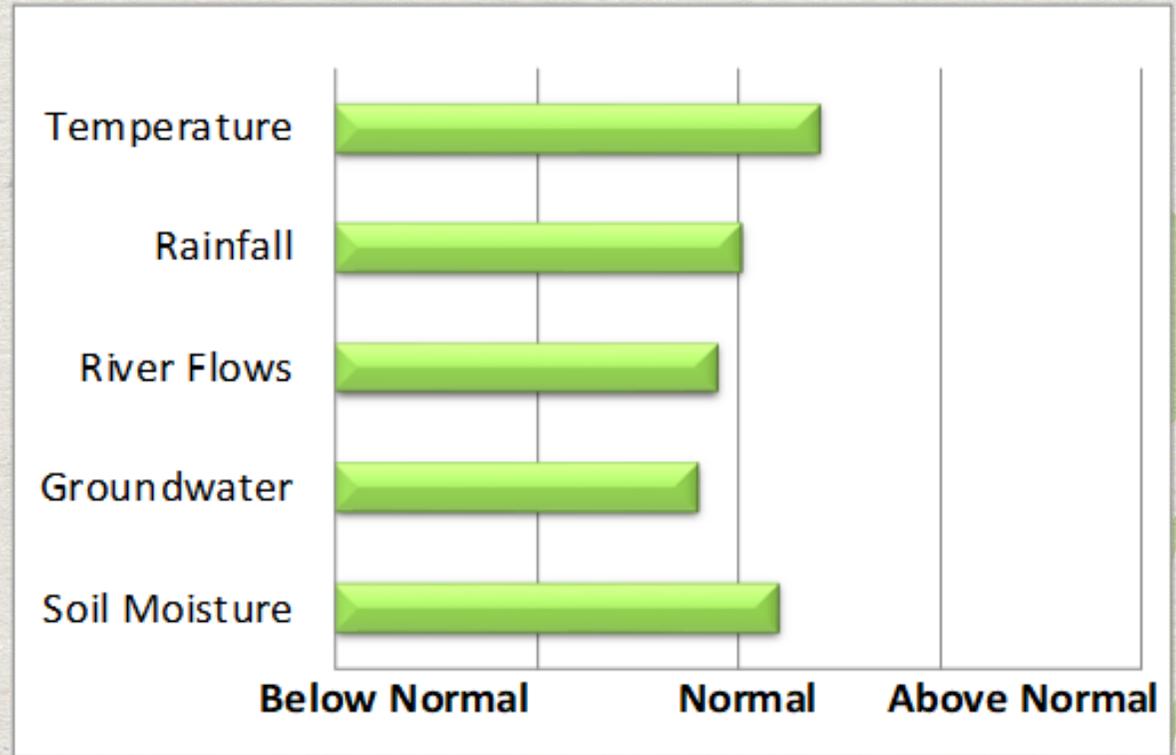
Typical rainfall for late winter and mild.

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

September to November

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

(source : NIWA)



For more information

www.hbrc.govt.nz

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RAINFALL

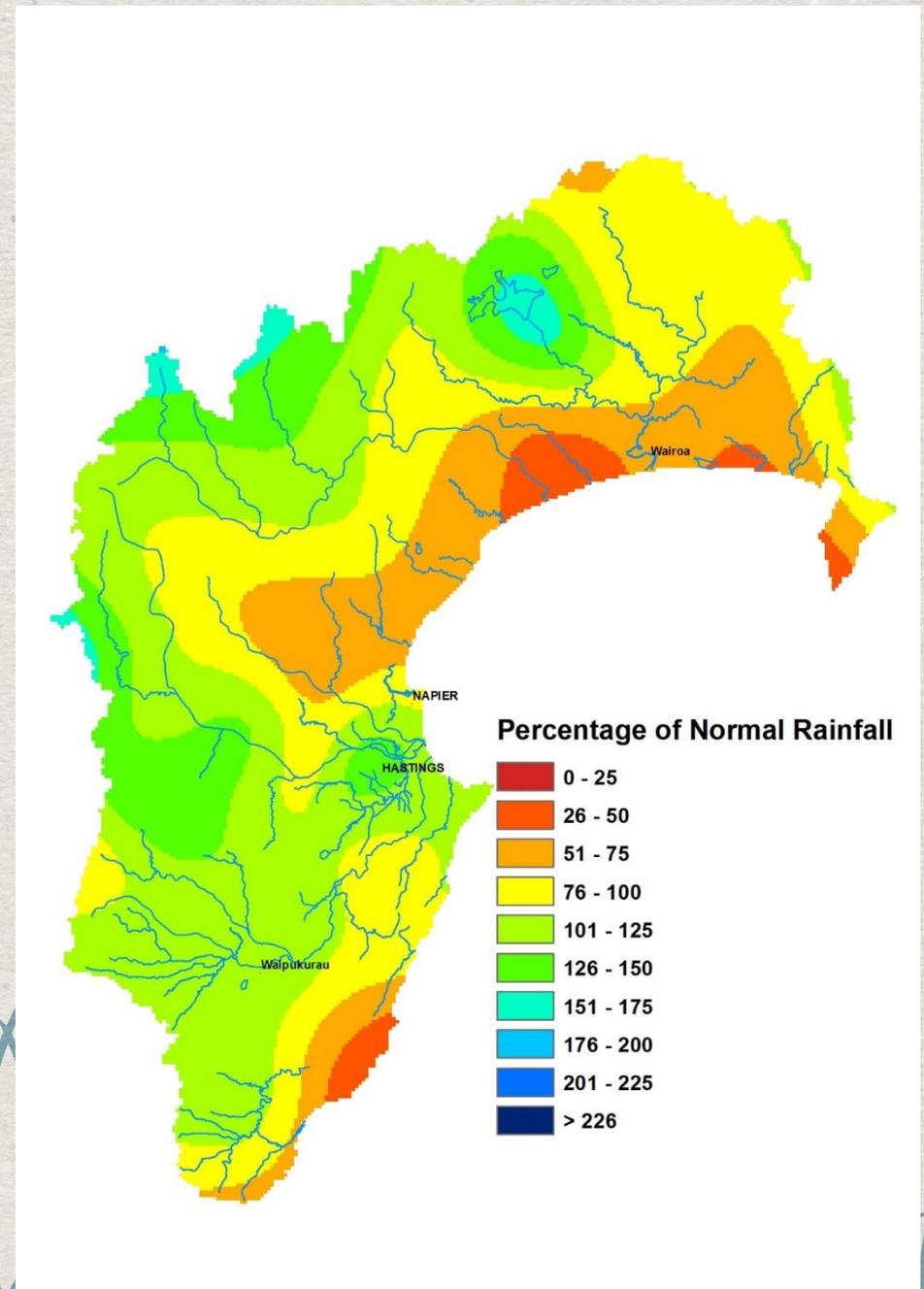
Almost spot on the August average. No lightning strikes (cloud to ground) over land but a few in Hawke's Bay

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

Percentage of normal August rainfall
(30 year average)

For areas in the region:

Waikaremoana	116%
Northern HB	72%
Tangoio	74%
Kaweka	113%
Ruahine	112%
Heretaunga Plains	109%
Ruataniwha Plains	115%
Southern HB	94%
Hawke's Bay Region	101%



TEMPERATURES

Warm, both during the day and overnight.

Mean Difference from Normal

Maximum Temperature: 0.5°C

Minimum Temperature: 0.5°C

Mean Daily Maximum: 13°C

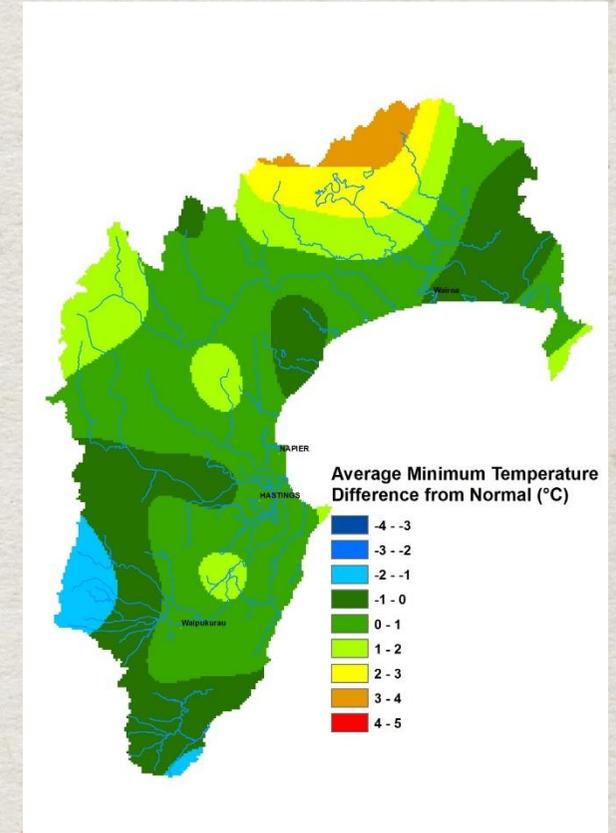
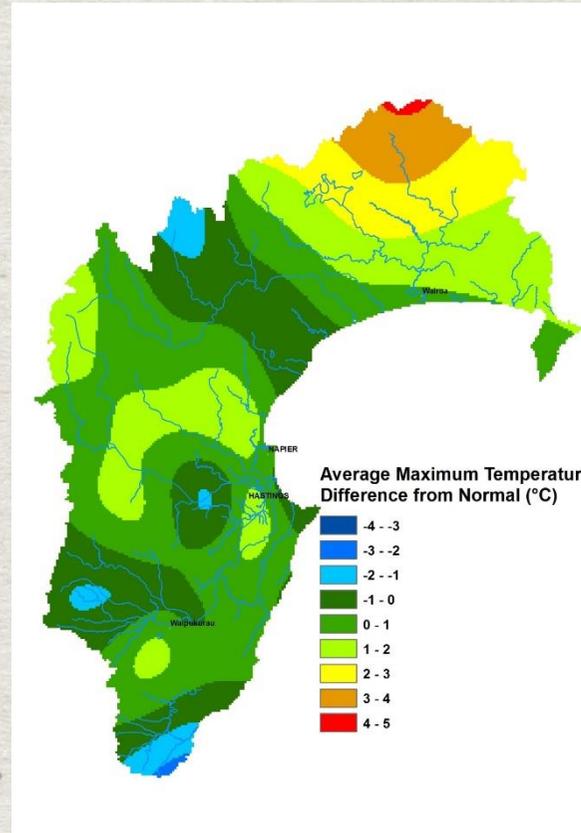
Mean Daily Minimum: 5°C

Highest Daily: 19.9°C

Location: Wairoa, North Clyde Ews

Lowest Daily: -3.4°C

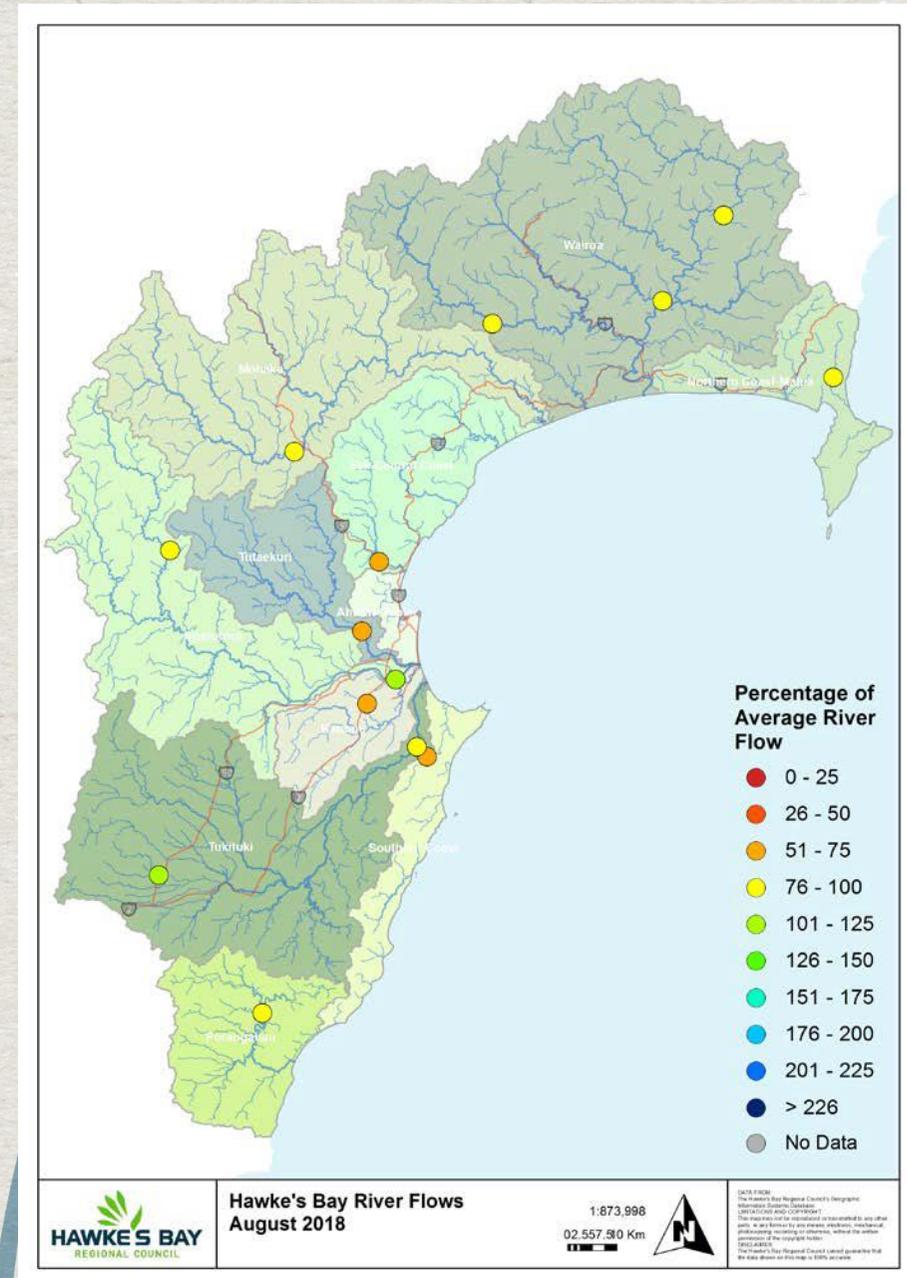
Location: Ongaonga and Taharua



RIVER FLOW

Percentage of average August flows for areas in the region:

Northern Coastal	76%
Northern HB – Hangaroa River	89%
Northern HB – Wairoa River	79%
Northern HB – Waiau River	99%
Mohaka	94%
Central Coastal	75%
Tūtaekuri	71%
Karamu	65%
Ngaruroro - Upper	83%
Ngaruroro - Lower	106%
Southern Coastal	74%
Ruataniwha Plains	102%
Tukituki	82%
Southern HB	93%
Hawke's Bay Region	85%



GROUNDWATER & SOIL MOISTURE

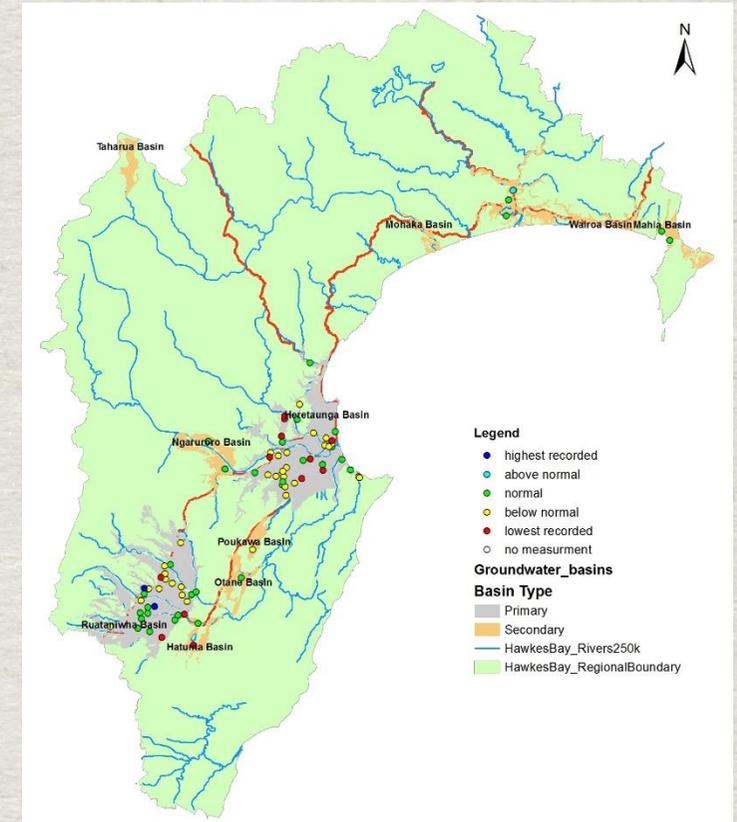
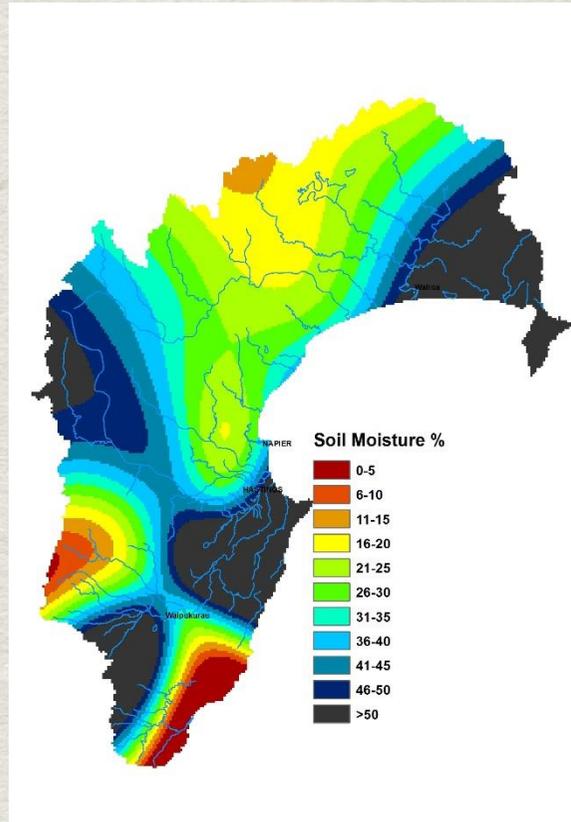
Groundwater:

Heretaunga basin: Mostly below normal levels.

Ruataniwha basin: A mix of normal and below normal water levels.

Secondary basins: Mostly above normal water levels and normal water levels.

Soil Moisture: Above normal



A great result, no exceedances.

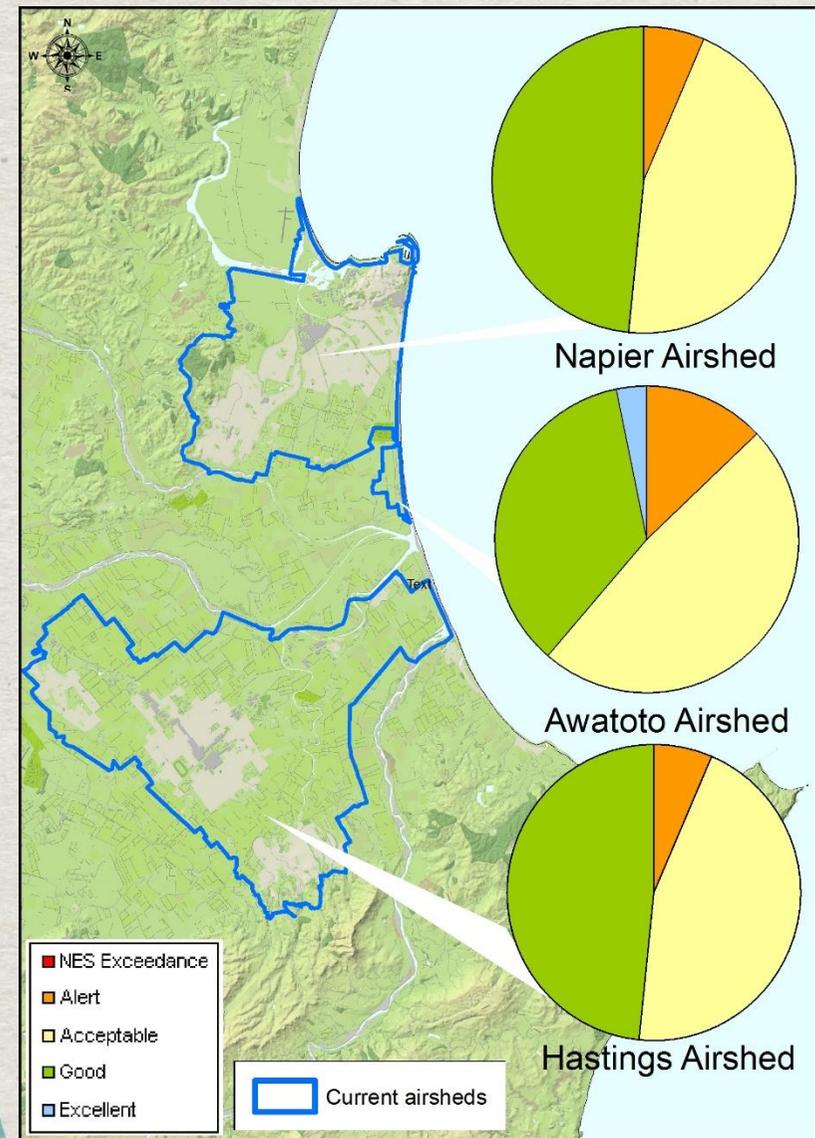
Figure 1: PM₁₀ levels in the Napier, Hastings and Awatoto airsheds during August 2018.

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 August 2018.

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

We still have neutral El Niño-Southern Oscillation (ENSO) conditions but expect them to favour El Niño in the months ahead. It's not likely to be a strong event and could be one sometimes called a modoki El Niño, which sees warming sea temperatures focused around the dateline rather than further east. It can still lower the odds of above normal rainfall over the spring and summer period. The three month forecasts from seasonal models are mixed – some wet, some dry, some normal! Lower than normal pressures over the North Island this month makes it look a wet one but things may even out to normal in the following months with roughly normal temperatures.