



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

May 2021

  
**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## May 2021

It's almost worth a round of applause - the region's rainfall finally making it into the near normal category. But keep your hands in your mittens because the distribution of May rainfall across the region was very biased to northern areas, leaving the Heretaunga and Ruataniwha Plains plus the southern coastal area confronting six consecutive months of below normal rainfall. That's half a year.

There certainly wasn't a standing ovation from river flows which stayed rooted to their below normal status and groundwater levels were dominated by the below normal sector. North of Napier, soil moisture in May was good. South of Napier, pretty much custard. Either below median levels or in the lowest 10<sup>th</sup> percentile of records for the end of May.

Temperatures were pleasantly mild for the month, both day and night. That helped kick off the air quality reporting season in great fashion. Low on particulates but too high on wasps. It's the second time in a few years I've been stung on my bike, on my inner thigh and spookily or maybe predictably at the same location. Who knew Breakwater Road by Napier Port is a cyclist-hating wasp hood.

**Kathleen Kozyniak**  
Principal Scientist - Climate and Air

## SUMMARY May 2021

A good amount of rain... for some. Warm.

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

*Data and images provided by HBRC.*

### May to July Forecast

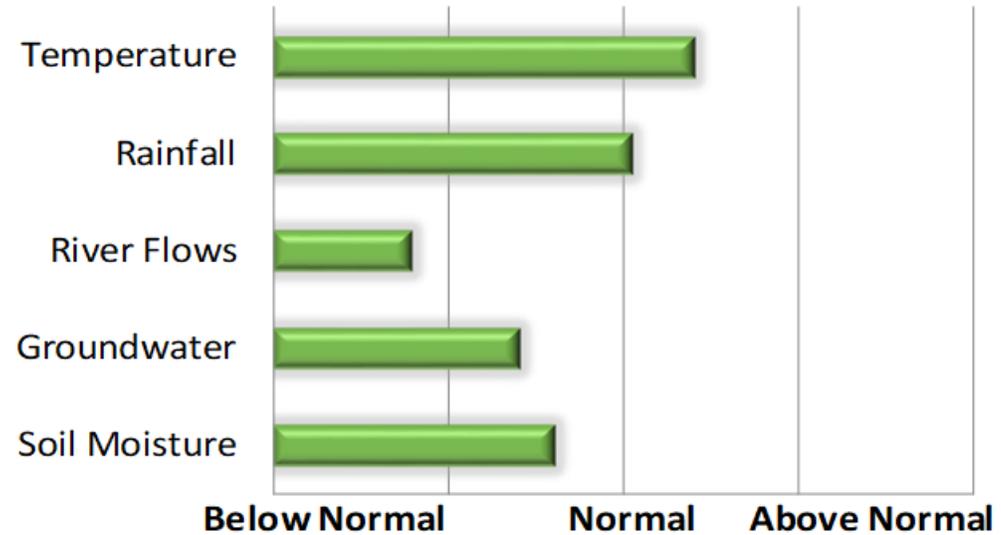
Temperature Near or above average  
Rain Near or above normal  
River flows Near or below normal  
Soil moisture Near or below normal

*source : NIWA*

**For more information**

**[www.hbrc.govt.nz](http://www.hbrc.govt.nz)**

**P: 06 835 9200**



## RAINFALL

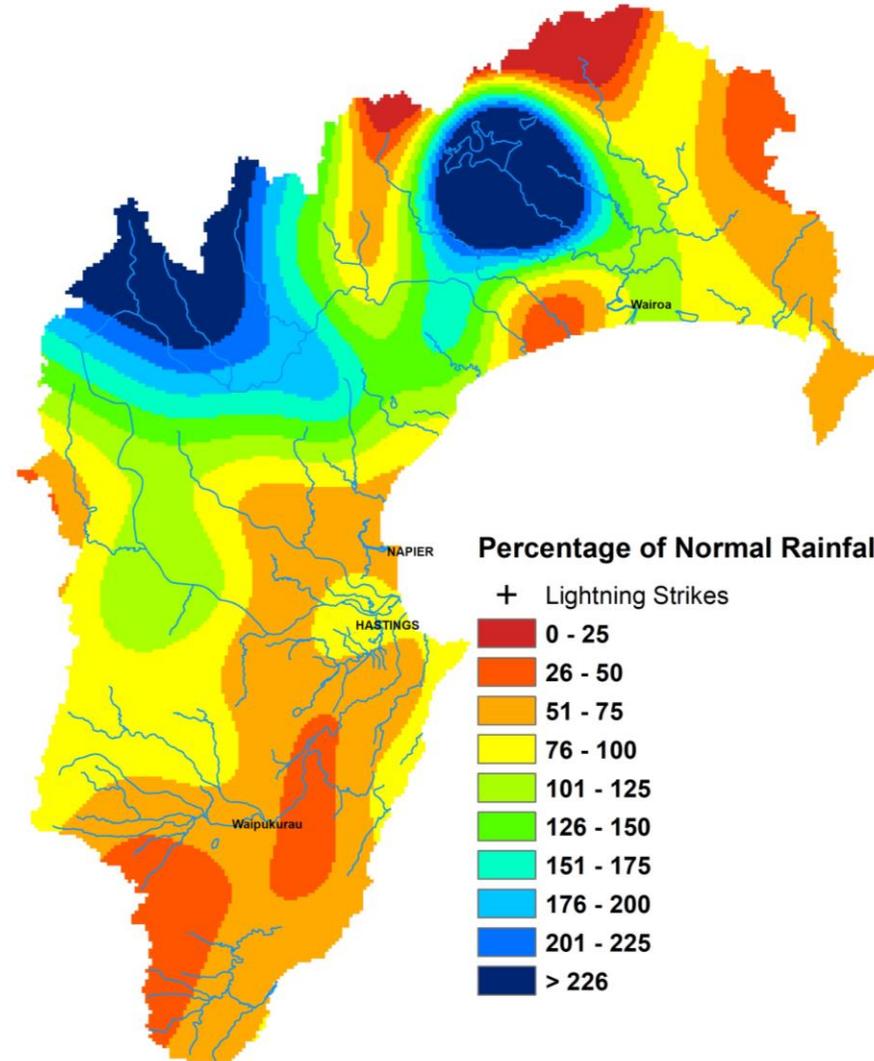
Near normal but heavily weighted to the north and less in the south. No cloud to ground lightning strikes.

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

Percentage of normal May rainfall  
(30 year average)

### For areas in the region:

Waikaremoana	191%
Northern HB	113%
Tangoio	117%
Kaweka	107%
Ruahine	95%
Heretaunga Plains	70%
Ruataniwha Plains	65%
Southern HB	60%
<b>Hawke's Bay Region</b>	<b>102%</b>



## TEMPERATURES

Warmer than usual.

Mean Difference from Normal

Maximum Temperature: 1.0 °C

Minimum Temperature: 0.6 °C

Mean Daily Maximum: 16 °C

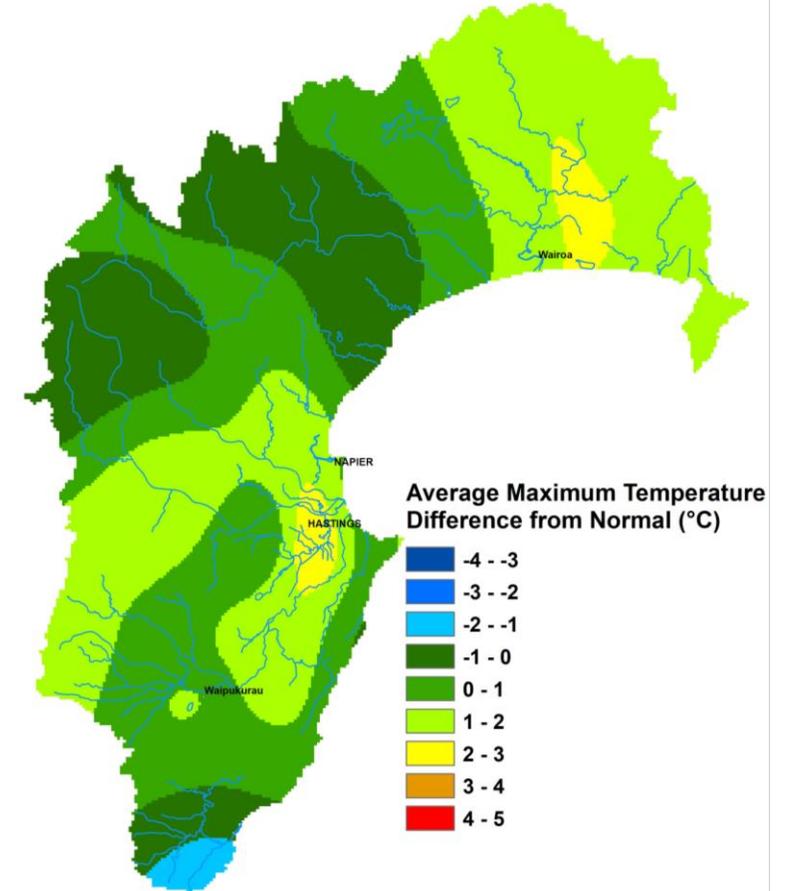
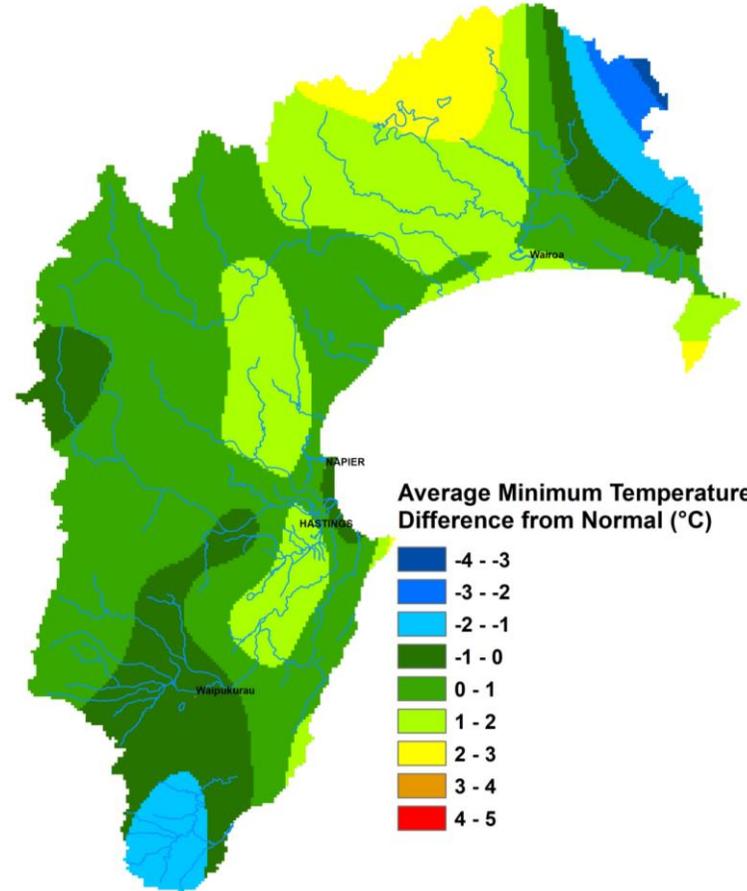
Mean Daily Minimum: 7°C

Highest Daily: 28.1°C

Location: Hastings AWS

Lowest Daily: -5.4 °C

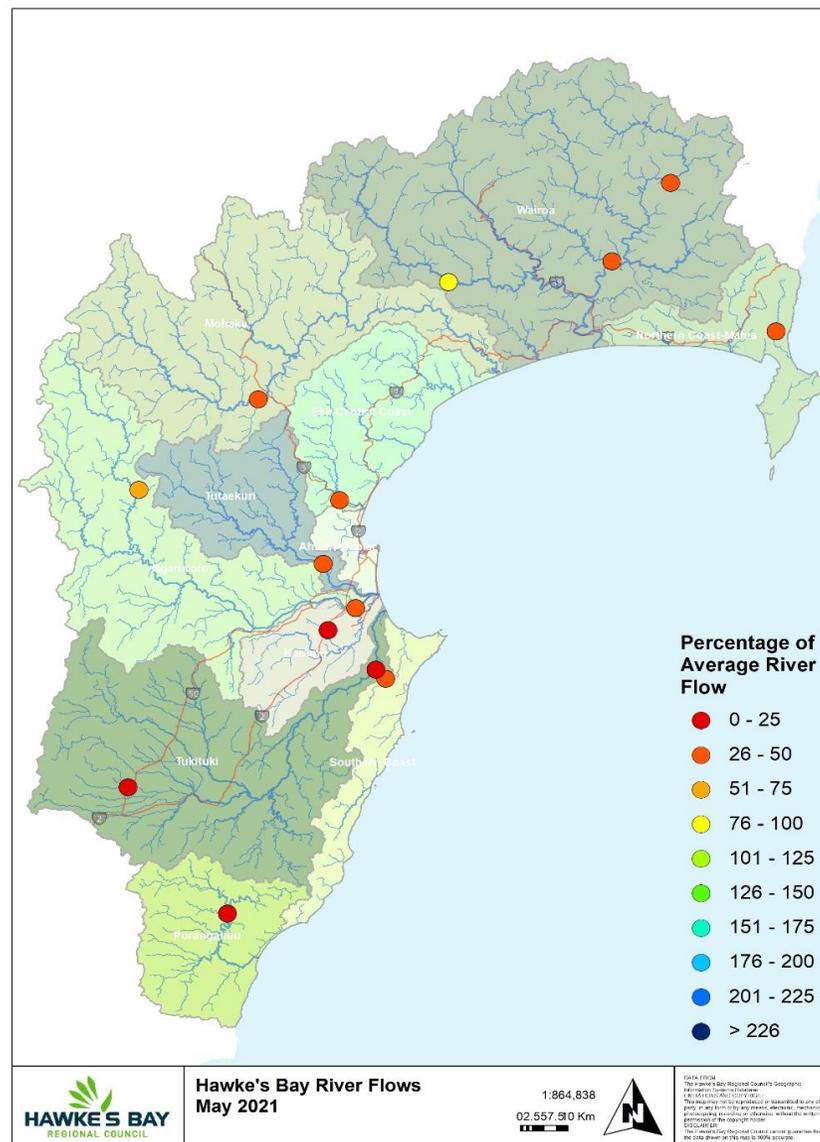
Location: Taharua



## RIVER FLOW

Percentage of average May flows  
for areas in the region:

Northern Coast – Mahia	43%
Northern HB – Hangaroa River	27%
Northern HB – Wairoa River	48%
Northern HB – Waiau River	80%
Mohaka	50%
Esk-Central Coast	50%
Tūtaekuri	46%
Karamu	24%
Ngaruroro – Kuripapango	62%
Ngaruroro – Chesterhope	42%
Southern Coast	36%
Tukituki – Tukipo River	15%
Tukituki – Tukituki River	23%
Porangahau	0%
<b>Hawke's Bay Region</b>	<b>39%</b>



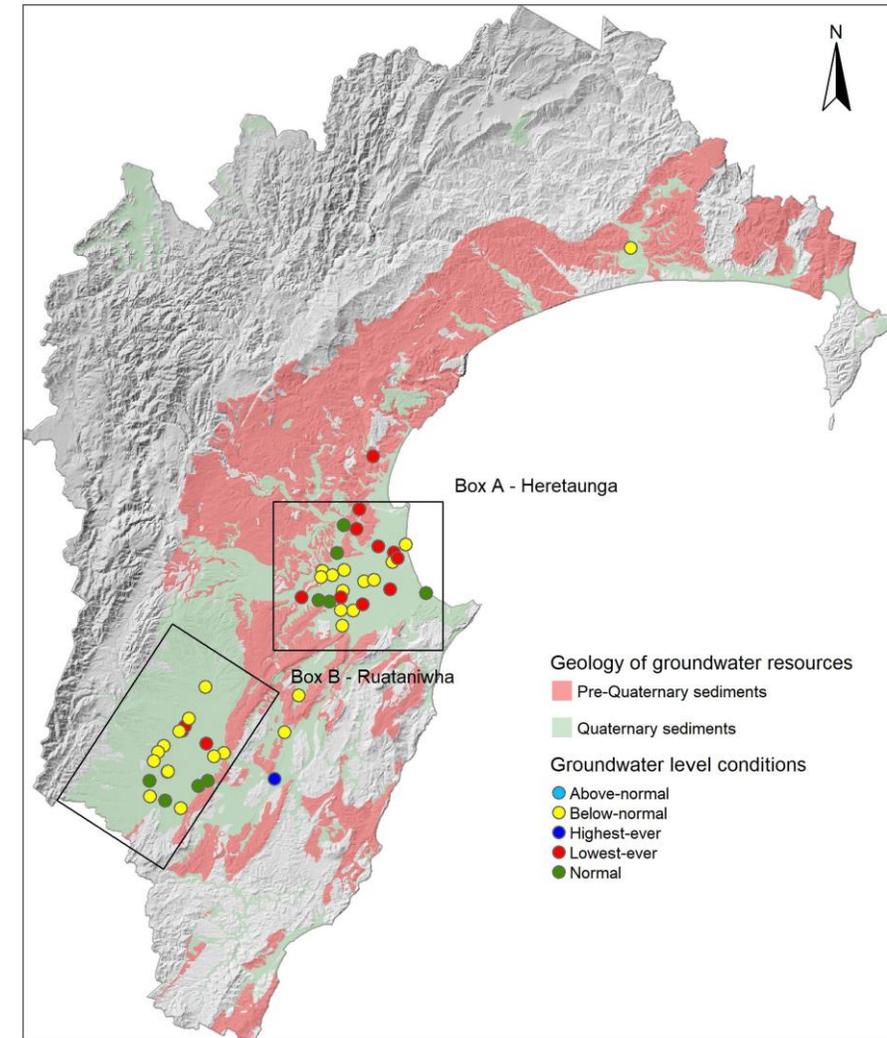
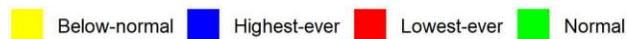
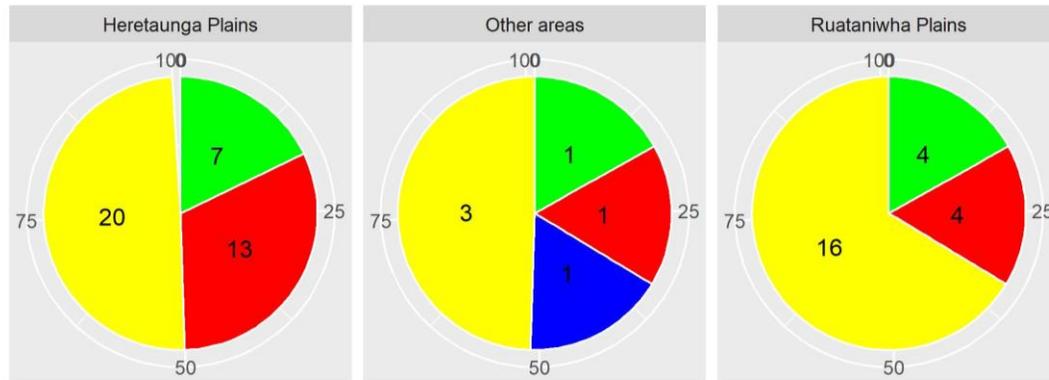
## GROUNDWATER & SOIL MOISTURE

**Soil Moisture:** Near normal in the north, below normal in the south.

### Current state of Groundwater levels:

This report compares groundwater levels in May 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

Terrific. No exceedances.

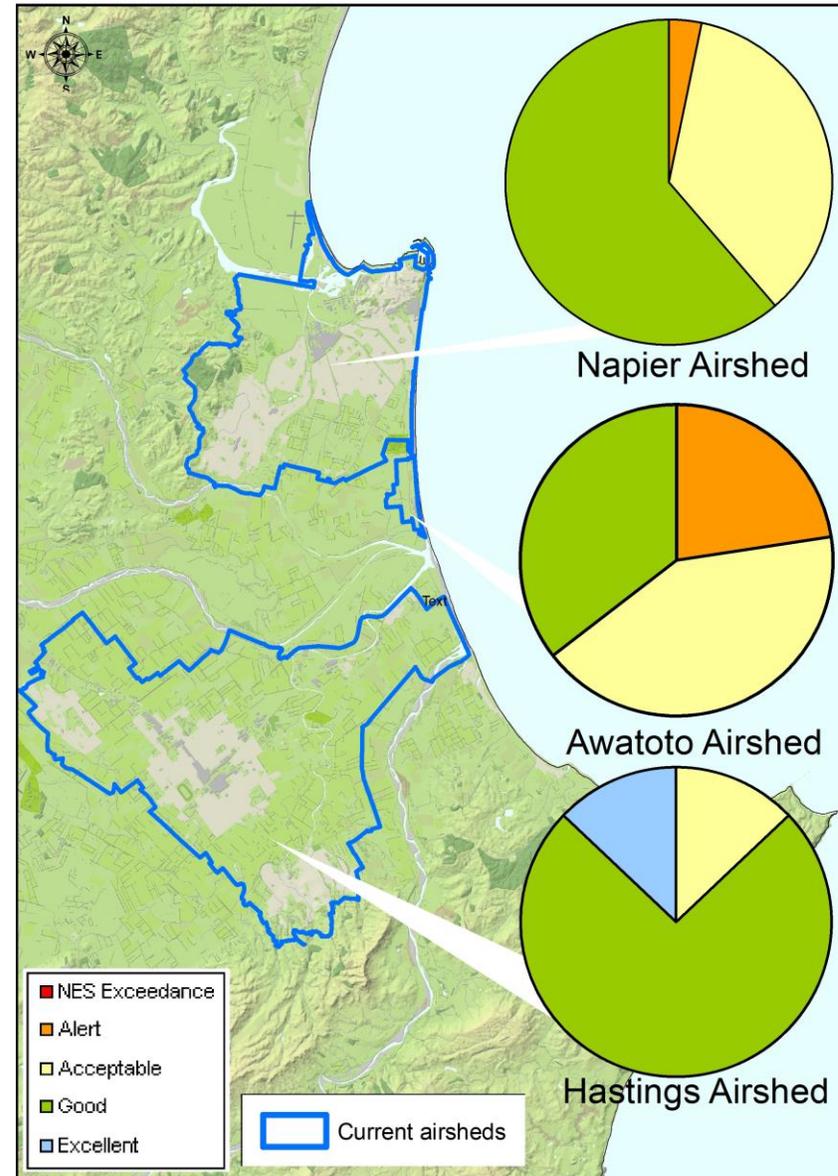
**Figure 1:** Environmental performance categories for PM<sub>10</sub> levels in the Napier, Hastings and Awatoto airshed during May 2021

### **PM<sub>10</sub> exceedances:**

The National Environmental Standard (NES) for particulate matter (PM<sub>10</sub>) of 50 micrograms per cubic metre (24 hour average) was not exceeded in the Napier, Hastings and Awatoto airsheds during May 2021.

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](http://www.hbrc.govt.nz)



## LONGER FORECAST

The La Niña is over. We have neutral conditions which should last for the six months at least. Near normal sea level pressures are expected around New Zealand for winter while lower than normal pressures extend over most of Australia and the Tasman Sea.

A mix of mainly northeast (1<sup>st</sup> and 3<sup>rd</sup> months) and westerly winds (2<sup>nd</sup> month) are the likely result and above normal temperatures. Near normal rainfall is forecast, while NIWA and Metservice also place good odds on above normal rainfall for winter and June respectively.

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