



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

March 2021



**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## March 2021

A sneaky rain dance wouldn't go amiss. With rainfall not even hitting 50% of the long term average for March, our tally of consecutive months of below normal rainfall hit four in the Kaweka and Ruahine Ranges, the Heretaunga and Ruataniwha Plains and along the region's southern coastline.

Our monitored river flows fell further below normal than they were last month and wells with below normal or lowest-ever water levels outnumbered those with levels in the normal range. March soil moisture levels were okay in the northeast of the region but otherwise lagged below normal for the time of year and in one or two cases they shimmied into the lowest 10<sup>th</sup> percentile of readings for the month.

Daytime temperatures were appropriately autumn-like and although nights weren't exactly sweat-buckets, they were warmer than usual. So a night time swim at our bathing spots, while not overly wise, wasn't out of the question, especially if you avoided some northern spots early on in the month. A big thumbs up to the diligent water quality team who have now wound down the summer time monitoring.

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

## SUMMARY March 2021

Dry (again) and warm nights.

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

### April to June Forecast

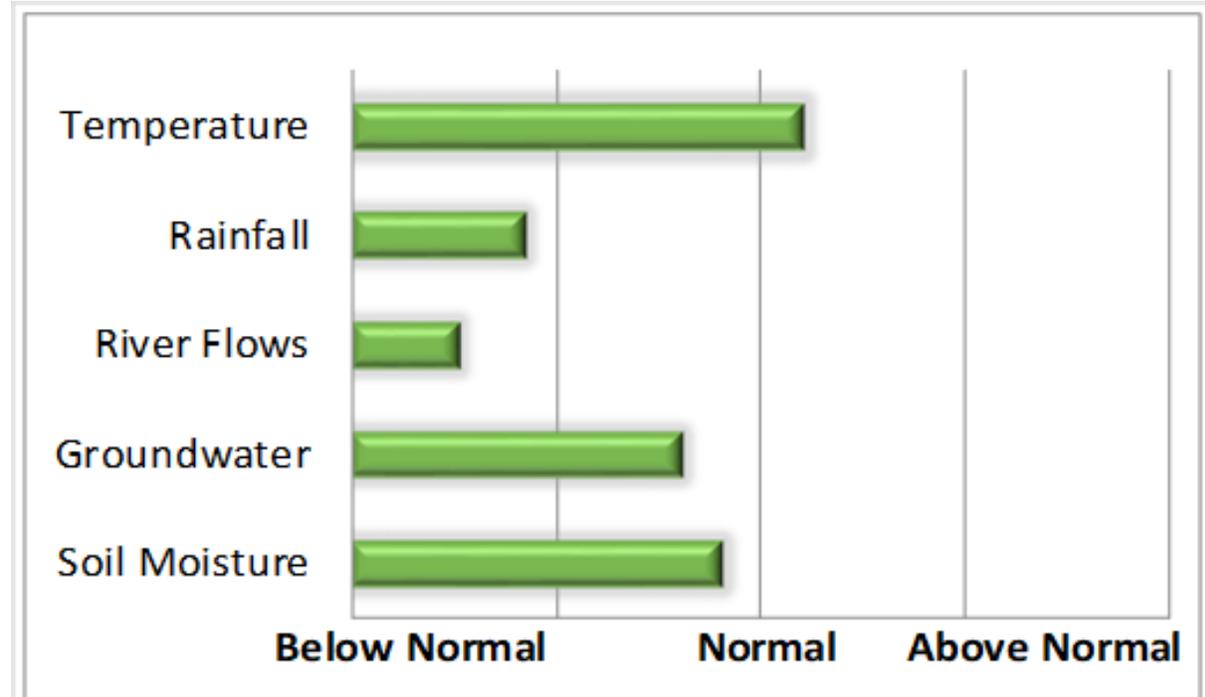
Temperature Near or above average  
Rain Near normal  
River flows Near normal  
Soil moisture Near or below normal

*source : NIWA*

For more information

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

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## RAINFALL

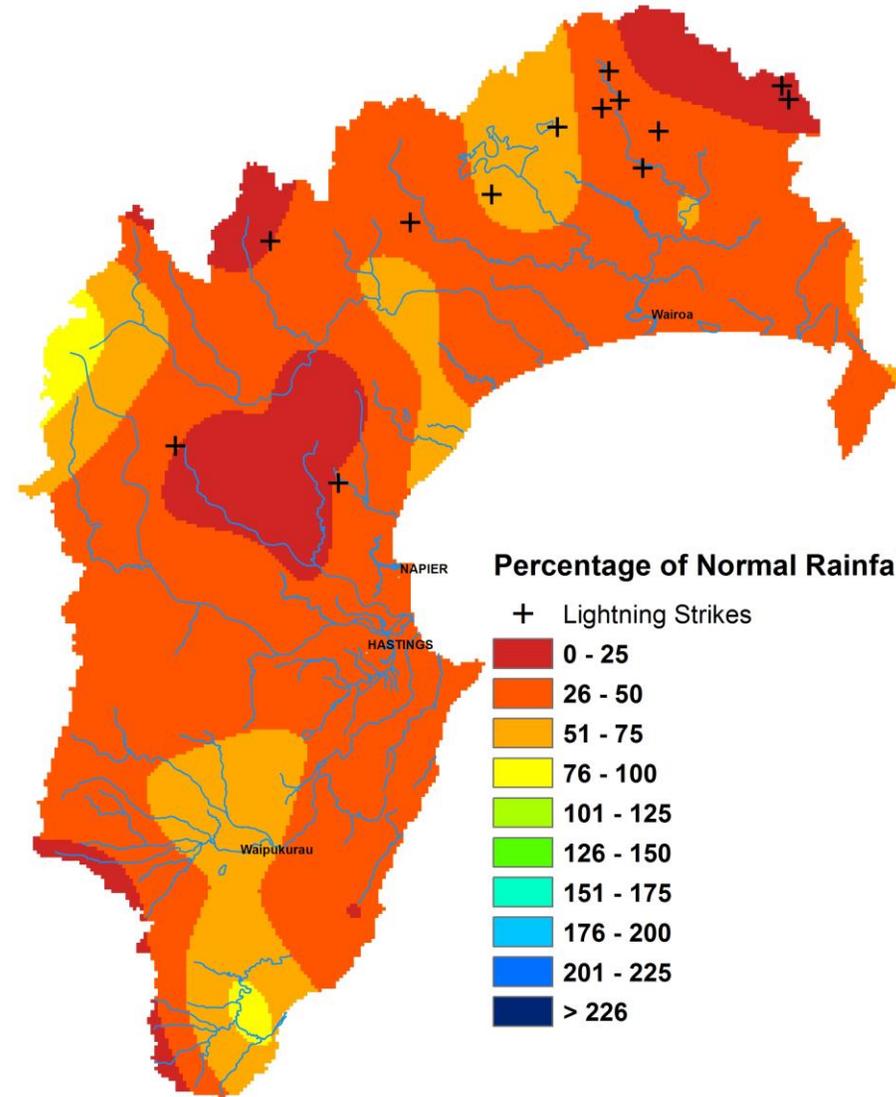
Struggled. Well below normal across the region.  
13 cloud to ground lightning strikes.

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

Percentage of normal March rainfall  
(30 year average)

### For areas in the region:

Waikaremoana	46%
Northern HB	44%
Tangoio	29%
Kaweka	40%
Ruahine	40%
Heretaunga Plains	42%
Ruataniwha Plains	48%
Southern HB	48%
<b>Hawke's Bay Region</b>	<b>42%</b>



## TEMPERATURES

Average days, warm overnight.

Mean Difference from Normal

Maximum Temperature: 0.1 °C

Minimum Temperature: 0.7 °C

Mean Daily Maximum: 21 °C

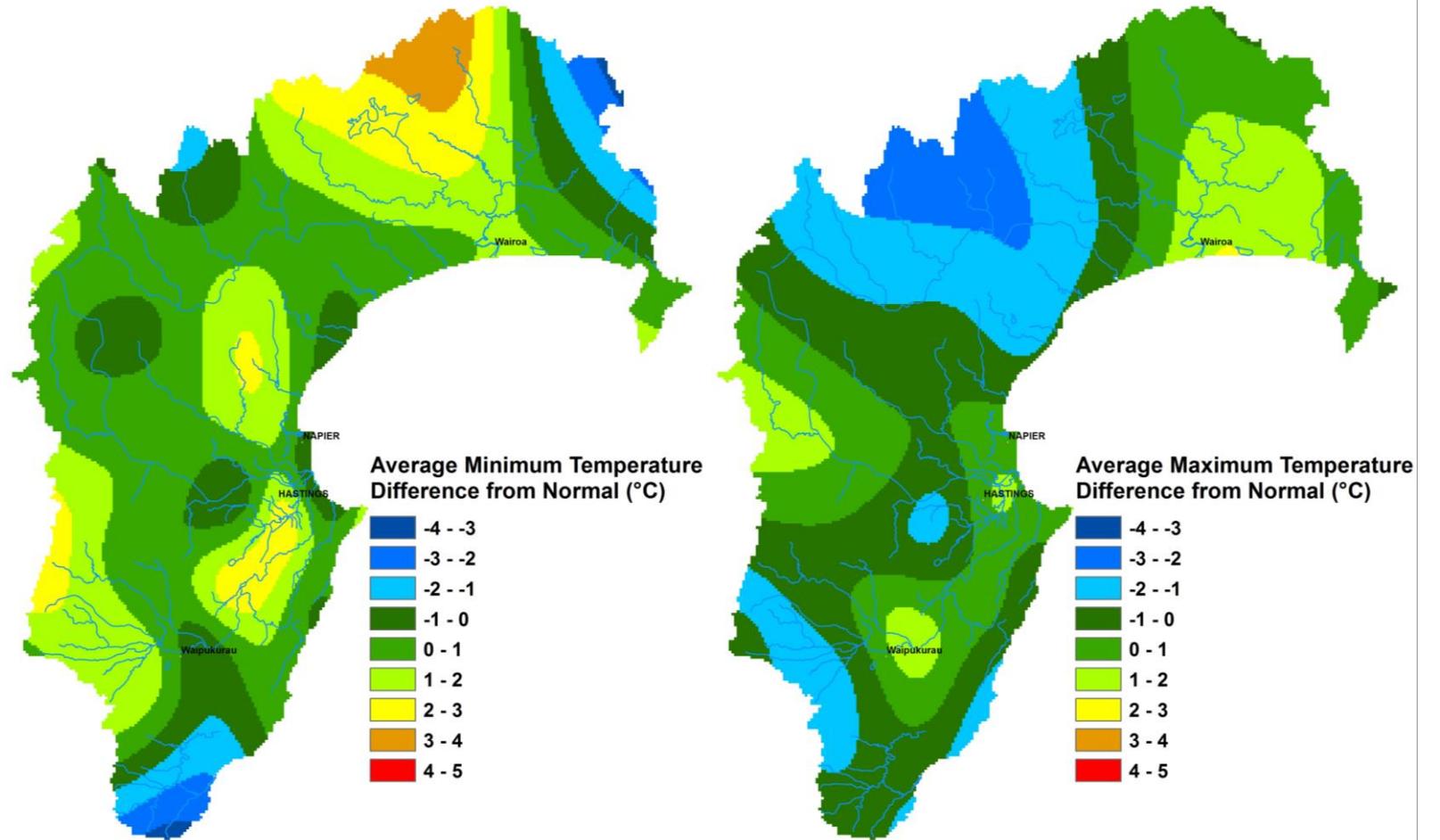
Mean Daily Minimum: 11°C

Highest Daily: 31.5°C

Location: Hastings AWS

Lowest Daily: -1.4 °C

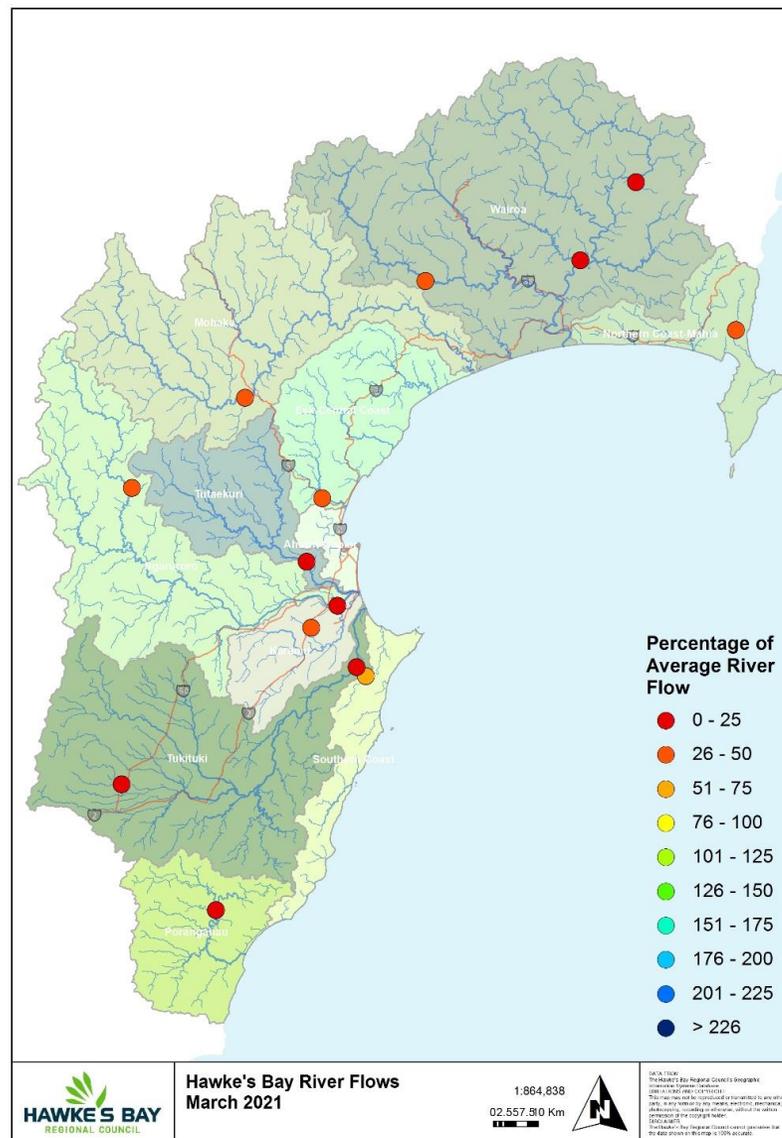
Location: Taharua



## RIVER FLOW

### Percentage of average March flows for areas in the region:

Northern Coast – Mahia	27%
Northern HB – Hangaroa River	11%
Northern HB – Wairoa River	19%
Northern HB – Waiau River	26%
Mohaka	42%
Esk-Central Coast	41%
Tūtaekuri	24%
Karamu	30%
Ngaruroro – Kuripapango	40%
Ngaruroro – Chesterhope	17%
Southern Coast	64%
Tukituki – Tukipo River	11%
Tukituki – Tukituki River	14%
Porangahau	0%
<b>Hawke's Bay Region</b>	<b>26%</b>



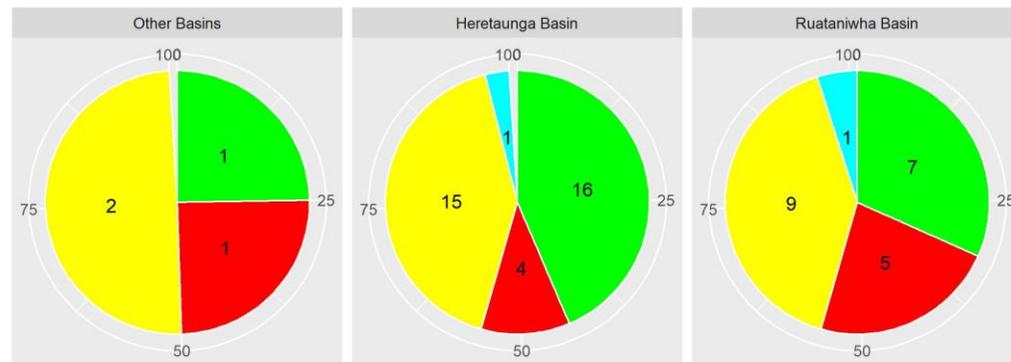
## GROUNDWATER & SOIL MOISTURE

**Soil Moisture:** Above normal in the northeast and below normal elsewhere.

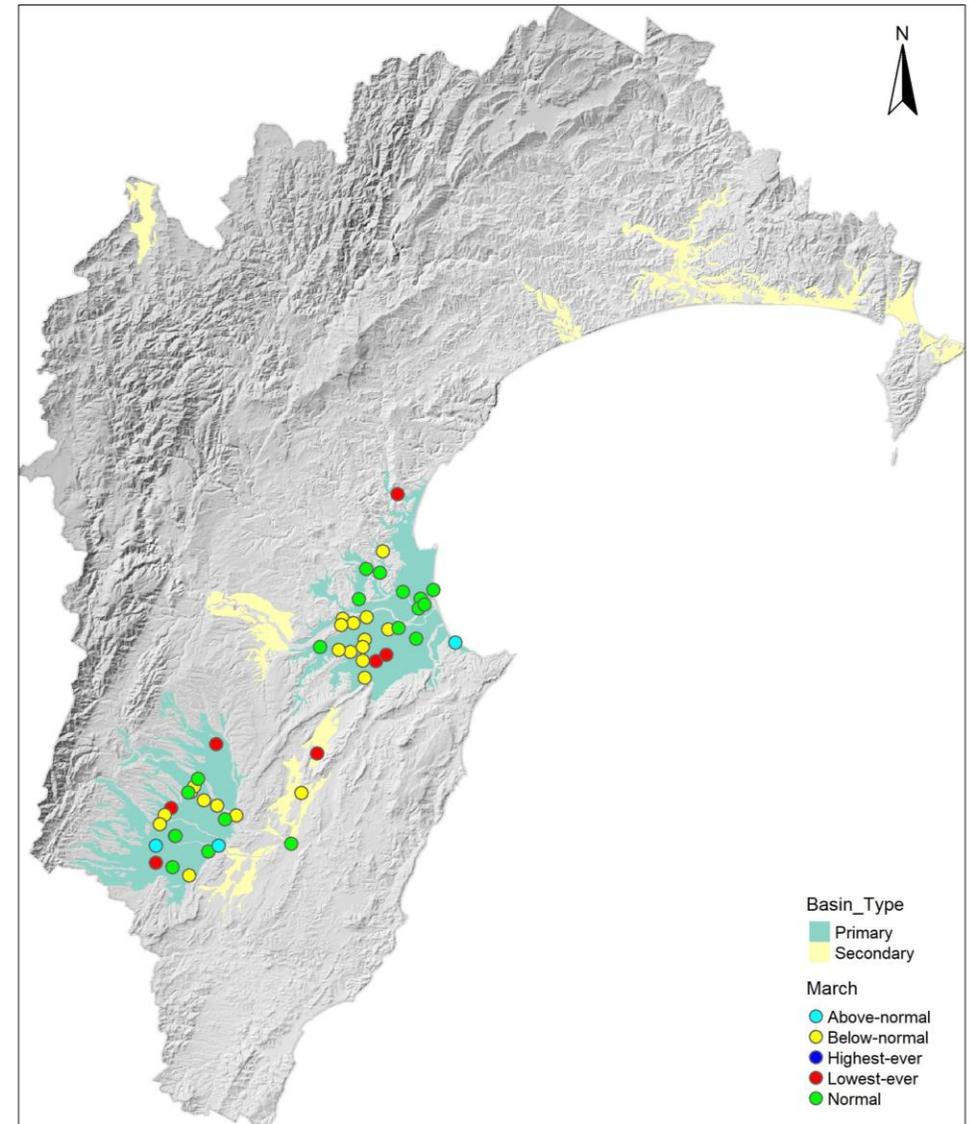
### Current state of Groundwater levels:

This report compares groundwater levels in March 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.



■ Above-normal ■ Below-normal ■ Lowest-ever ■ Normal



## RECREATIONAL WATER QUALITY

The Recreational Water Quality monitoring program finished up on Monday 15<sup>th</sup> March for the 2020-2021 season.

There were a handful of exceedances scattered around the region over early March, with the Wairoa River at Ski Club and Nuhaka River performing the worst overall.

The full report card for the 2020-2021 monitoring season will be available in the coming months.



## LONGER FORECAST

We're in the throes of farewelling La Niña conditions and hitting the neutral button. Nevertheless, the pattern of sea level pressure that has dogged us for months has no great will to change according to model predictions, which stick with lower pressures to the northwest of New Zealand and higher to the southeast. Things may vary a bit in May though, when lower pressures might extend over the country. It's a big might, but it would help deliver near normal rainfall for the period.

Northeasterlies are still expected to prevail but get set for a mid-April burst of (hopefully showery) westerlies. This time also sees a likely final flurry of tropical cyclone activity before the season ends. Sea surface temperatures are currently warmer than usual around us, keeping our air temperatures warm, so we'll likely see normal or above normal temperatures over the three months.

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