



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

December 2020

  
**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## December 2020

We were lucky that the weather around Christmas was quite cruddy, otherwise some parts of the region may have got through December on a couple of millimetres of rain. The inclement patch at the end of the month pushed the region up to half the average December rainfall and me into a poxy, full-body rash. And patchy describes both myself and the rainfall results, with the Heretaunga Plains scoring a lowly 22% in contrast to northern Hawke's Bay's 94%.

River flows have declined since November and are now looking normal or below normal. Thankfully soil moisture is still tracking above median levels for the time of year and groundwater levels are much healthier than they've been for some time - mostly and wonderfully near or above normal.

A dour, almost wintry few days aptly ended 2020, dipping temperatures slightly under the December average though within the normal range for the month. Our swimming spots had mixed fortunes in the month but were absolutely not to blame for me being an itch-fest. The northern sites in particular snagged some poor results in the late December rain.

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

## SUMMARY December 2020

Dry for most and not overly hot.

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

### January to March Forecast.

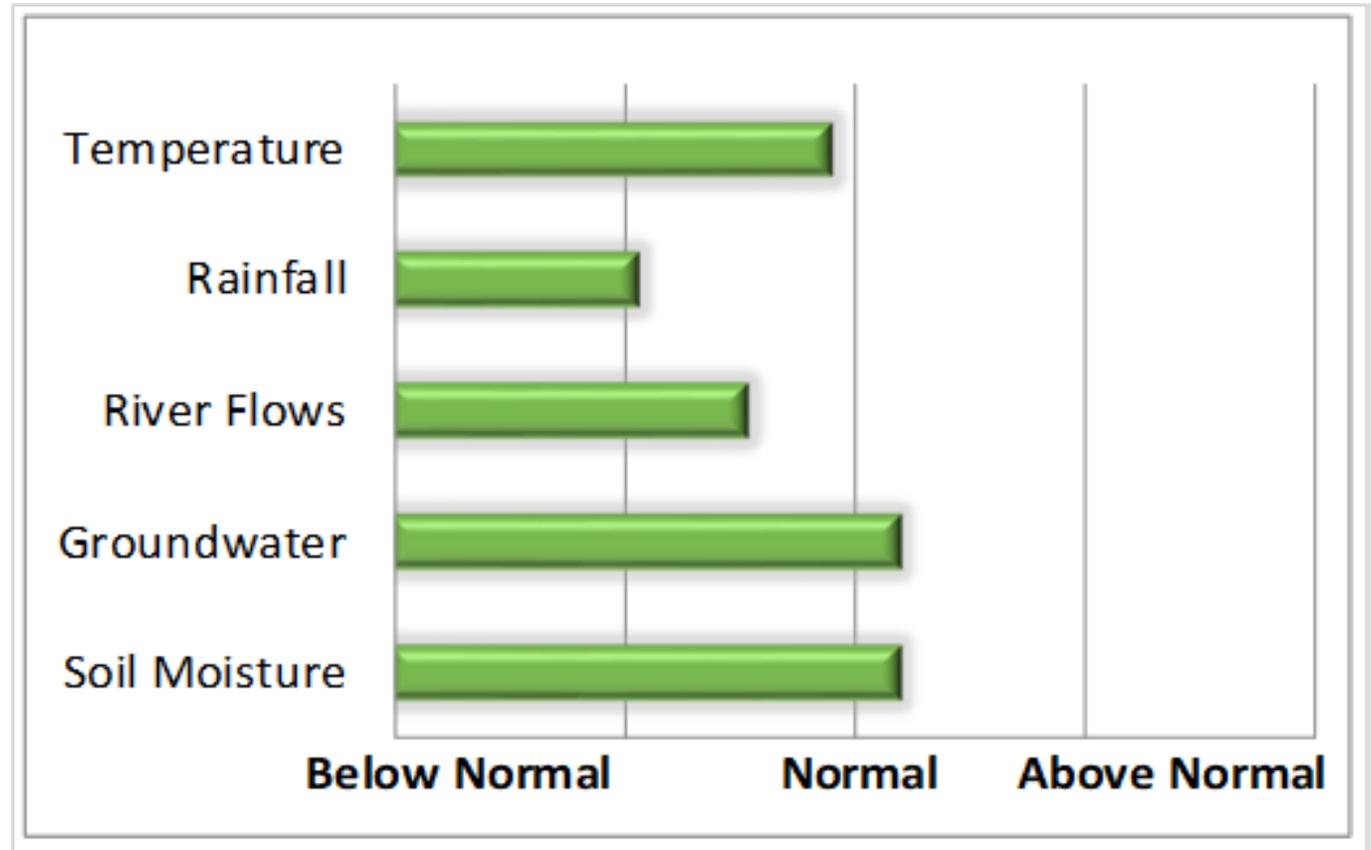
Temperature	Above average
Rain	Above or near normal
River flows	Near normal
Soil moisture	Near normal

source : NIWA

For more information

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

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## RAINFALL

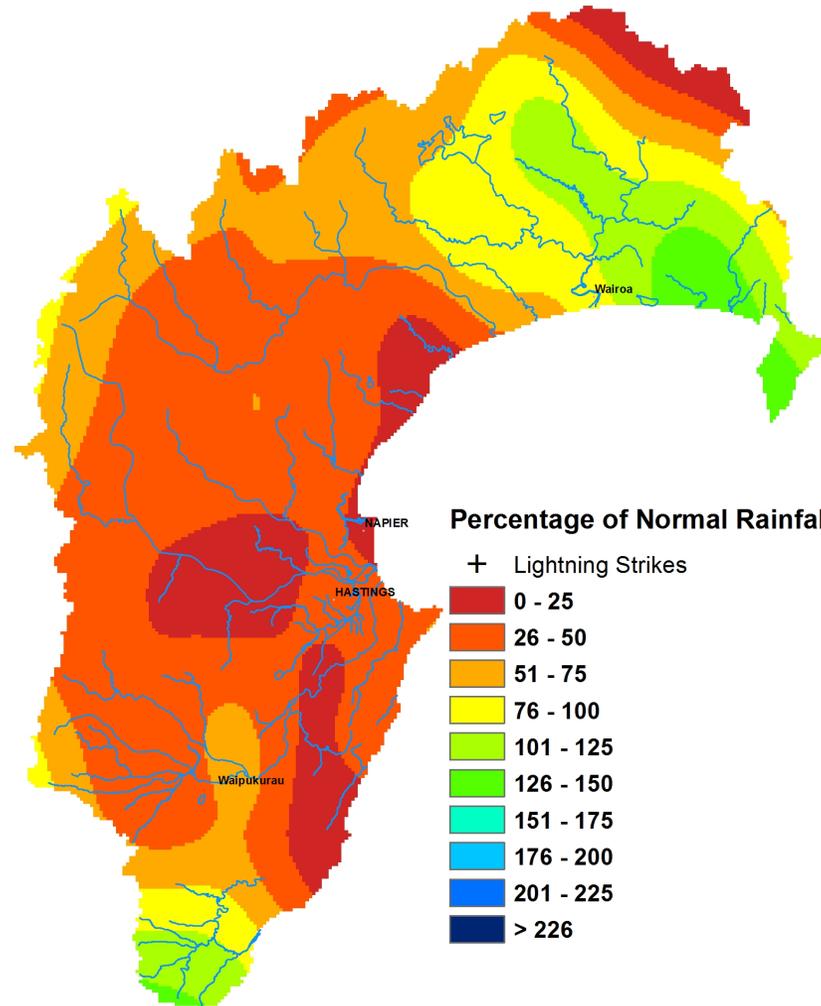
Below normal except for the north of the region where it was near normal. No cloud to ground lightning strikes.

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

Percentage of normal December rainfall  
(30 year average)

### For areas in the region:

Waikaremoana	80%
Northern HB	94%
Tangoio	39%
Kaweka	40%
Ruahine	44%
Heretaunga Plains	22%
Ruataniwha Plains	40%
Southern HB	63%
<b>Hawke's Bay Region</b>	<b>53%</b>



## TEMPERATURES

Near normal.

Mean Difference from Normal

Maximum Temperature:  $-0.2\text{ }^{\circ}\text{C}$

Minimum Temperature:  $-0.4\text{ }^{\circ}\text{C}$

Mean Daily Maximum:  $21\text{ }^{\circ}\text{C}$

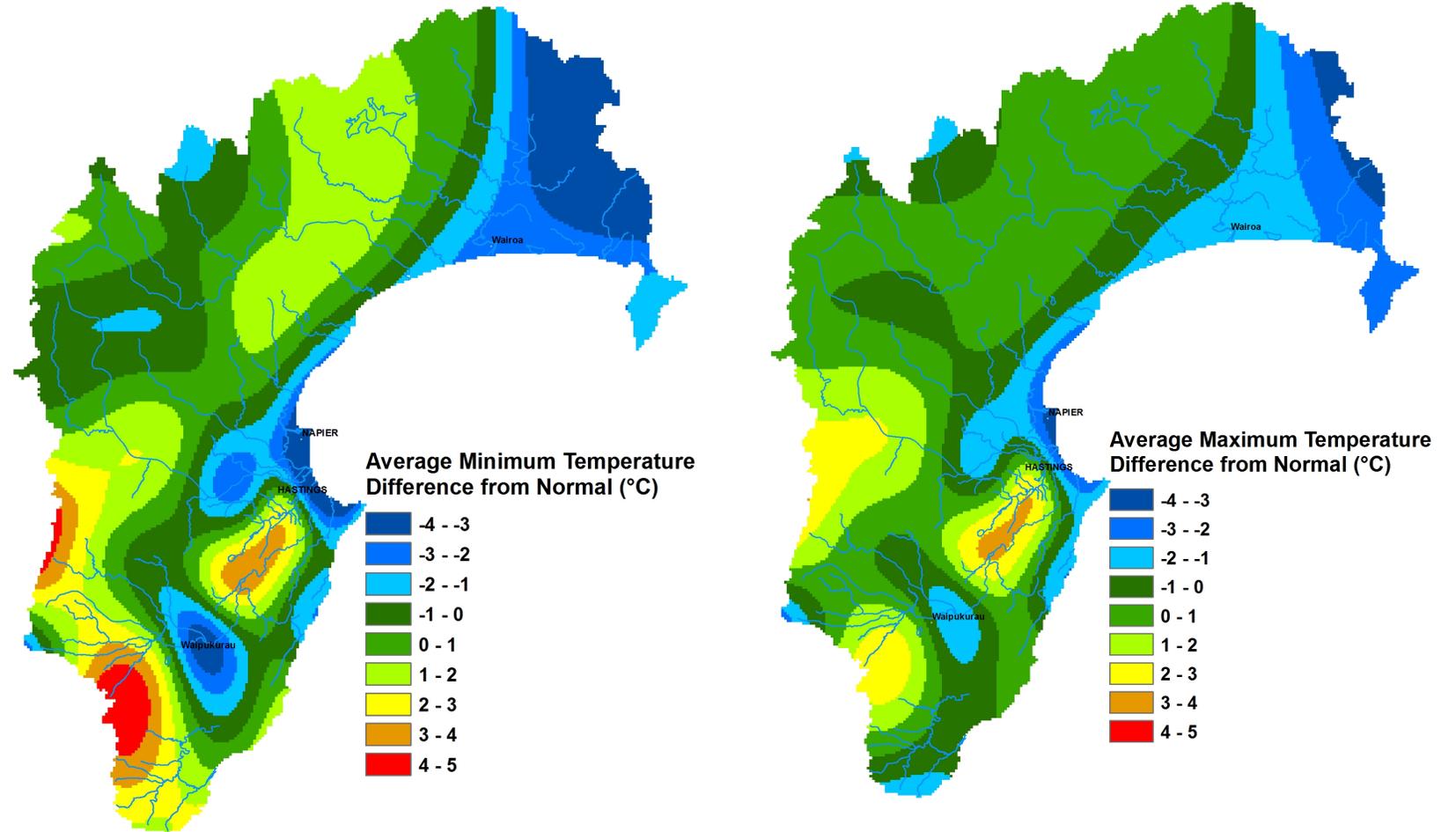
Mean Daily Minimum:  $11\text{ }^{\circ}\text{C}$

Highest Daily:  $32.5\text{ }^{\circ}\text{C}$

Location: Wairoa North Clyde EWS

Lowest Daily:  $0.7\text{ }^{\circ}\text{C}$

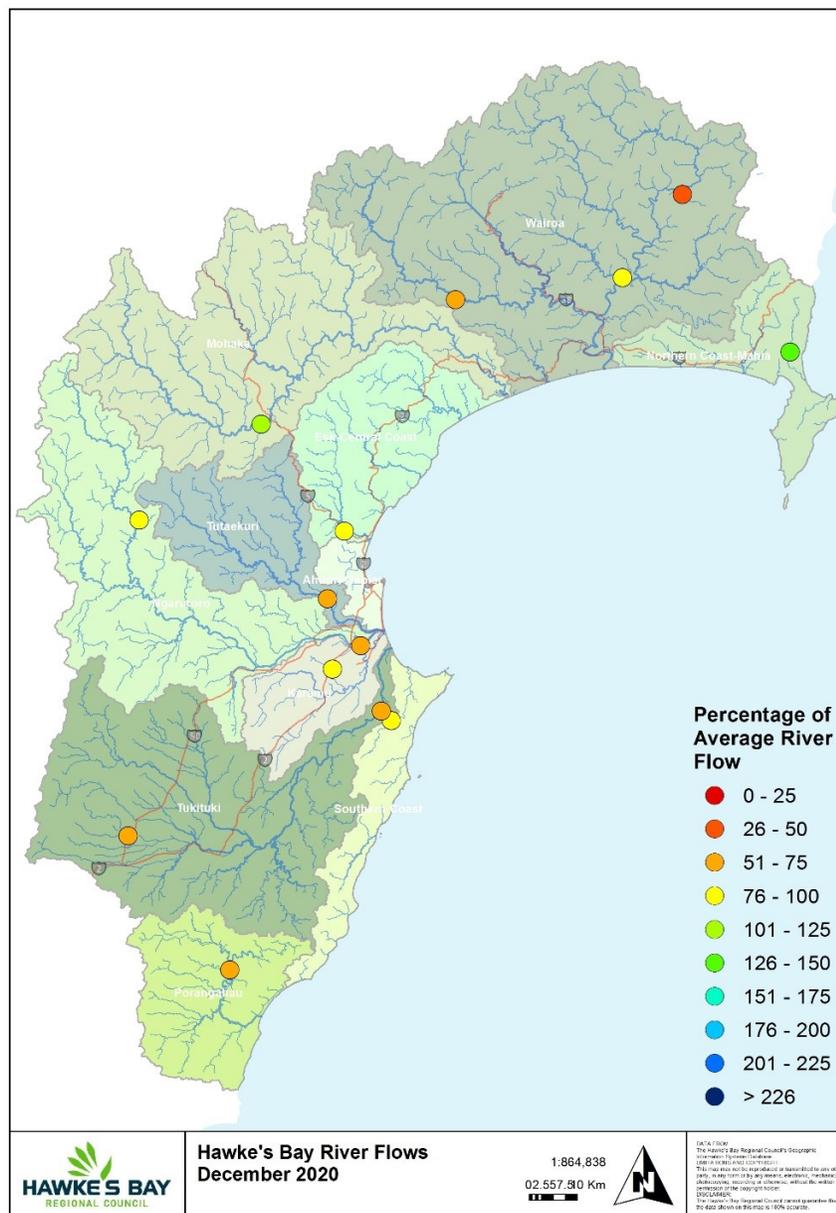
Location: Taharua



## RIVER FLOW

Percentage of average December flows for areas in the region:

Northern Coast – Mahia	150%
Northern HB – Hangaroa River	43%
Northern HB – Wairoa River	78%
Northern HB – Waiau River	59%
Mohaka	101%
Esk-Central Coast	77%
Tūtaekuri	60%
Karamu	90%
Ngaruroro – Kuripapango	93%
Ngaruroro – Chesterhope	76.4%
Southern Coast	76%
Tukituki – Tukipo River	65%
Tukituki – Tukituki River	60%
Porangahau	56%
<b>Hawke's Bay Region</b>	<b>77%</b>



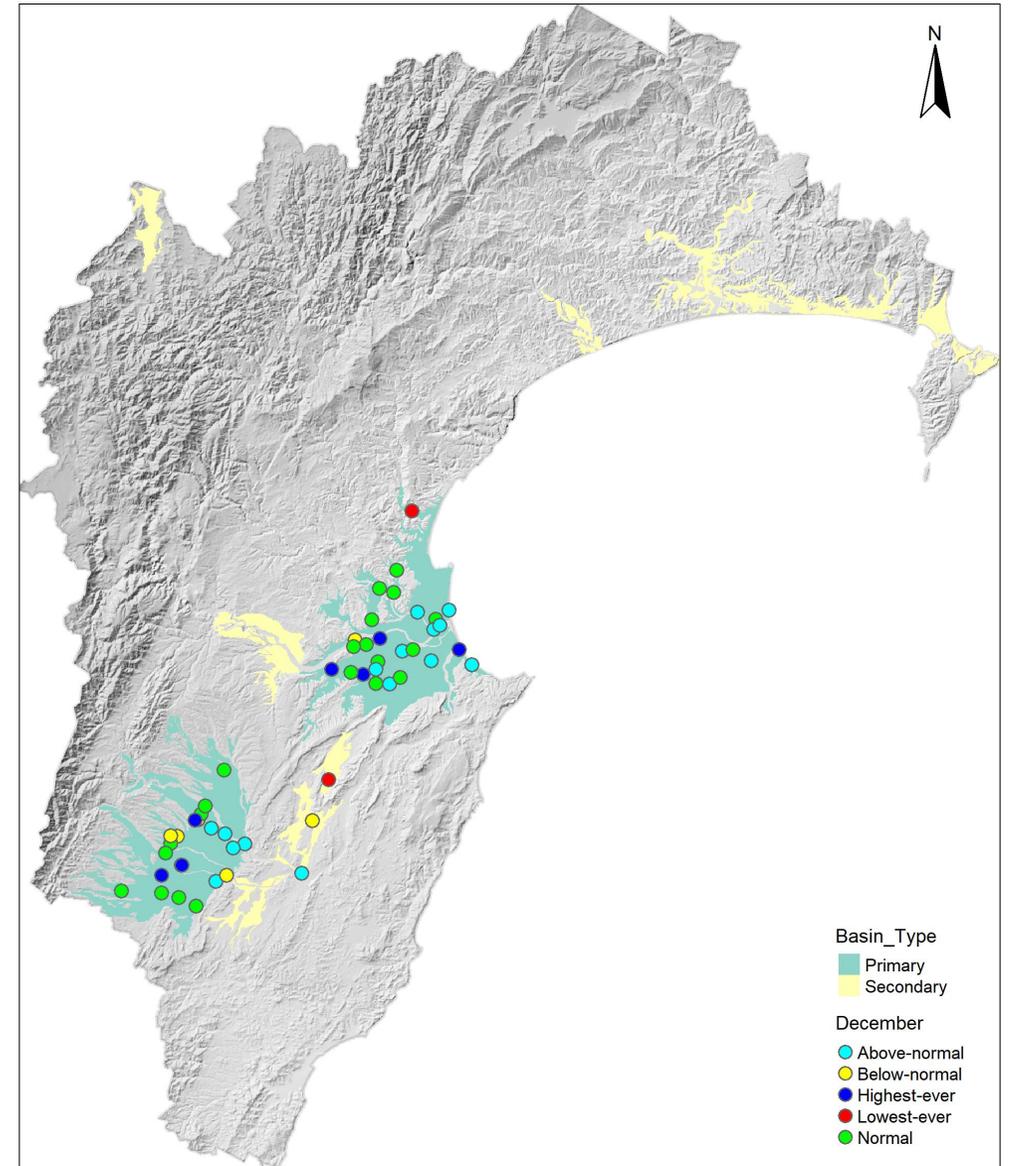
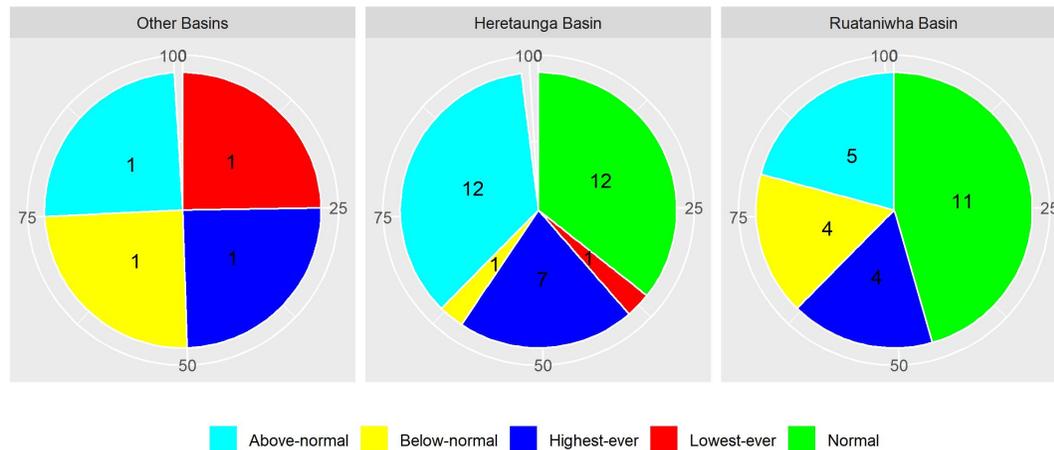
## GROUNDWATER & SOIL MOISTURE

**Soil Moisture:** Predominantly above normal but below normal in the northwest of the region.

### Current state of Groundwater levels:

This report compares groundwater levels in December 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.*



## RECREATIONAL WATER QUALITY

We had a handful of exceedances during December, resulting in a total of 7 resamples over the course of the month.

Northern Hawkes Bay experienced high rainfall around the Christmas/NY break, causing the Wairoa River, Mahia Beach and Opoutama Beach to exceed *E.coli* and Enterococci guidelines.

A sample has been sent away for Faecal Source Tracking after an unexpected exceedance at Lake Tutira.



## LONGER FORECAST

La Niña is still with us but is expected to weaken through autumn allowing neutral conditions to return. The predicted pattern of weather for the next three months is the same that I've reeled out over the last few months - sea level pressures are likely to be higher than normal over the south of the country and lower than normal to the northwest but near normal over our region. The outcome should be a predominantly easterly flow along with near or above normal rainfall and above normal temperatures.

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