



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

March 2020



**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## March 2020

Looking at the positives of March (though putting a “s” on positive might be overstating it), our “summer” water quality monitoring finished on a bright note. So well done if you took advantage before we rightly hunkered down in our bubbles.

Well done you too for braving temperatures that, on cue, turned autumnal in March. It ended our four month run of sweltering heat rather abruptly. Aside from fuelling paranoia that the change of season sniffle was rampant COVID19 community contagion, it let meagre water stocks take a social distanced breath rather than being immediately sucked into the never never.

On the down side, simply cast your eye over the remainder of our month’s summary.

Rainfall, river flows, groundwater levels and soil moisture levels are all on the wrong side of normal and in most cases significantly so. Hooray to some rain at the end of March, which certainly improved Southern Hawke’s Bay’s rainfall stats, but unfortunately barely nudged all other measures.

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

## SUMMARY March 2020

Not so hot but still dry.

*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.

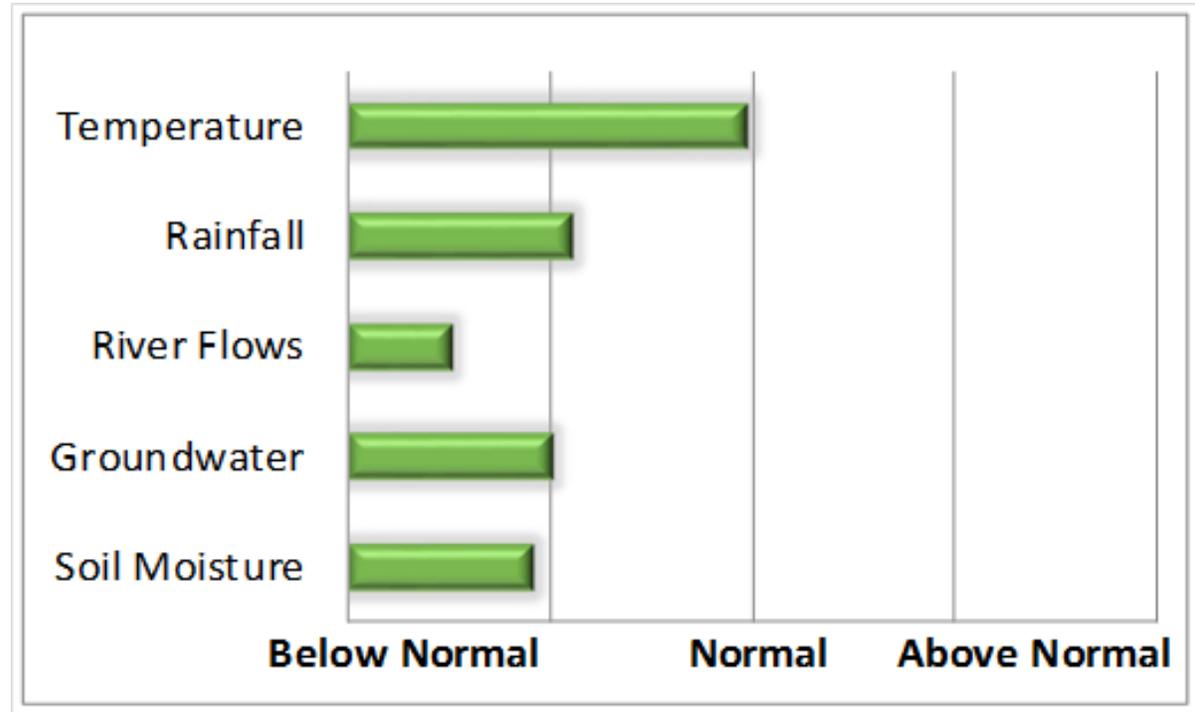
Temperature    Near or above average  
Rain            Near or below normal  
River flows    Near or below normal  
Soil moisture   Near or below normal

*source : NIWA*

For more information

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

P: 06 835 9200



## RAINFALL

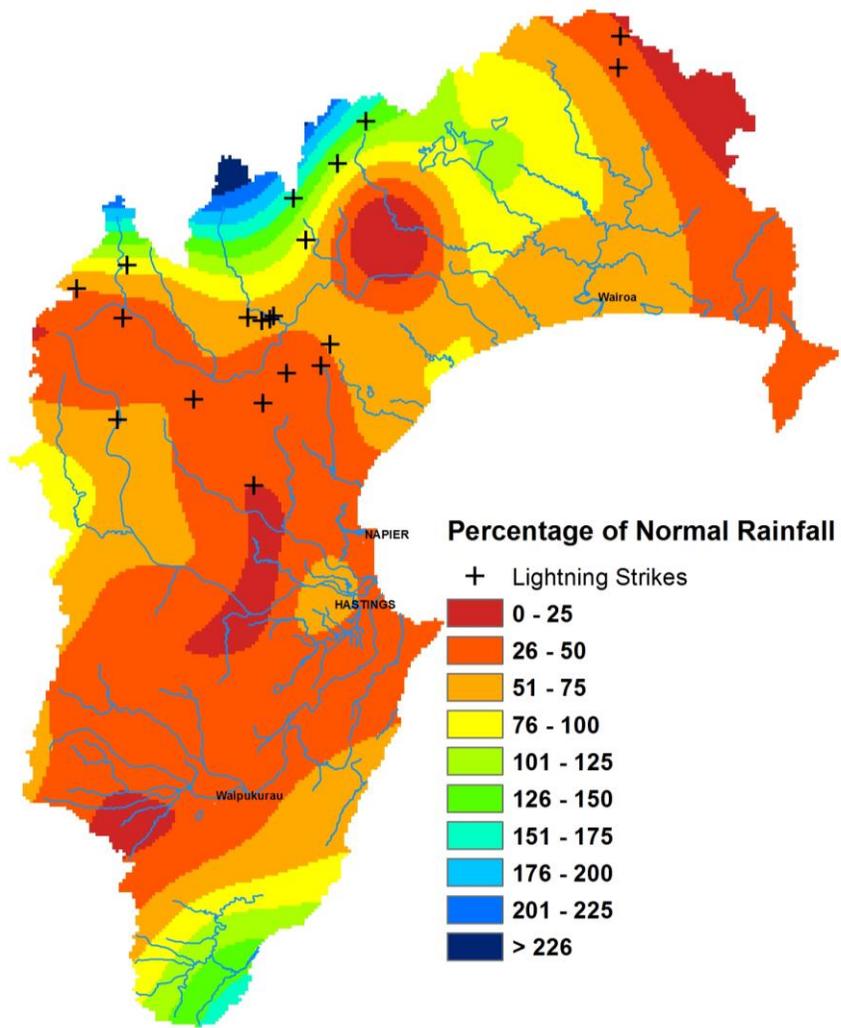
Well below normal in most areas.  
There were 20 cloud to ground lightning strikes.

*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	83%
Northern HB	62%
Tangoio	41%
Kaweka	61%
Ruahine	46%
Heretaunga Plains	39%
Ruataniwha Plains	35%
Southern HB	73%
<b>Hawke's Bay Region</b>	<b>55%</b>



## TEMPERATURES

Autumnal, near normal.

Mean Difference from Normal

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

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

Mean Daily Maximum:  $20\text{ }^{\circ}\text{C}$

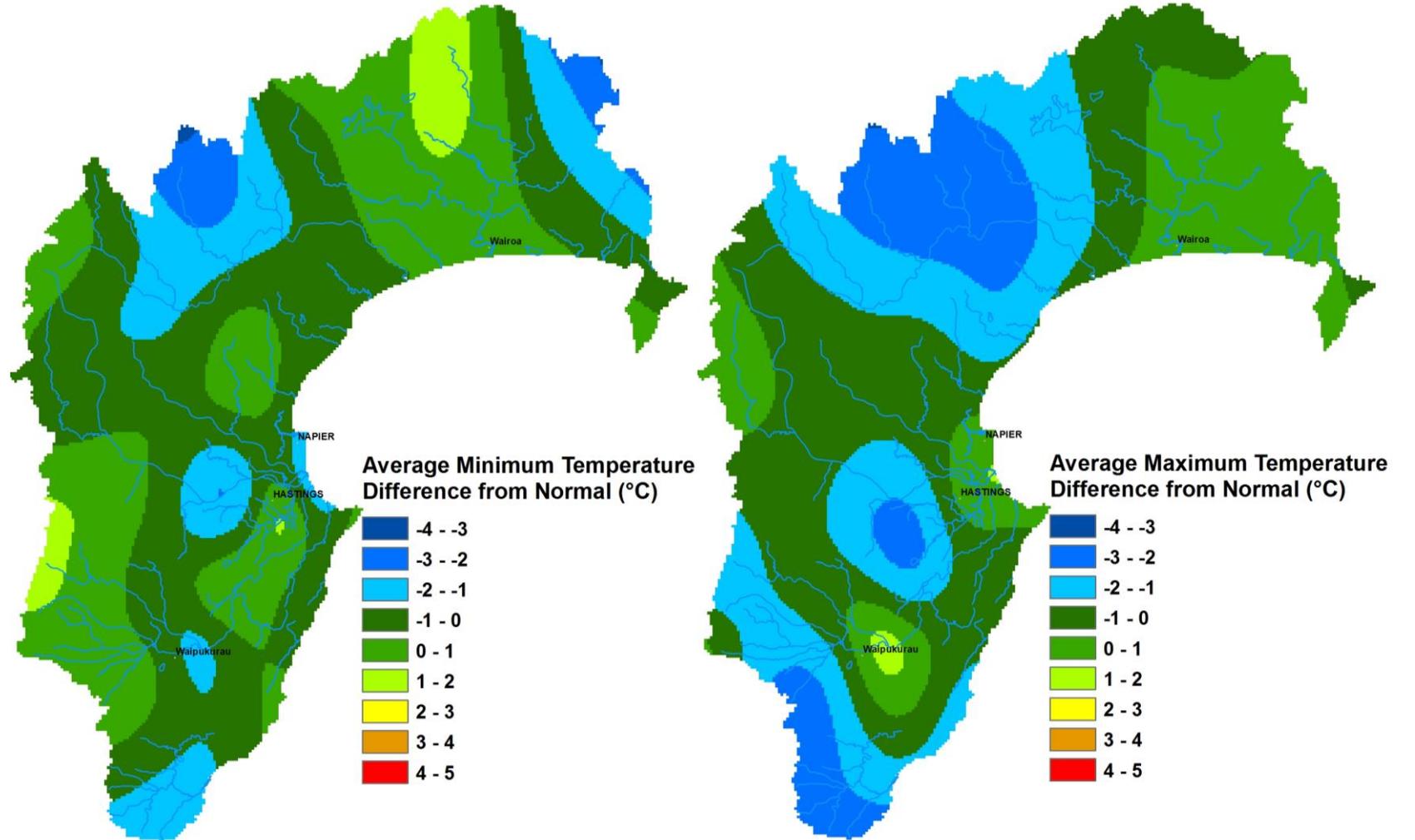
Mean Daily Minimum:  $10\text{ }^{\circ}\text{C}$

Highest Daily:  $31.8\text{ }^{\circ}\text{C}$

Location: Wairoa North Clyde EWS

Lowest Daily:  $0.3\text{ }^{\circ}\text{C}$

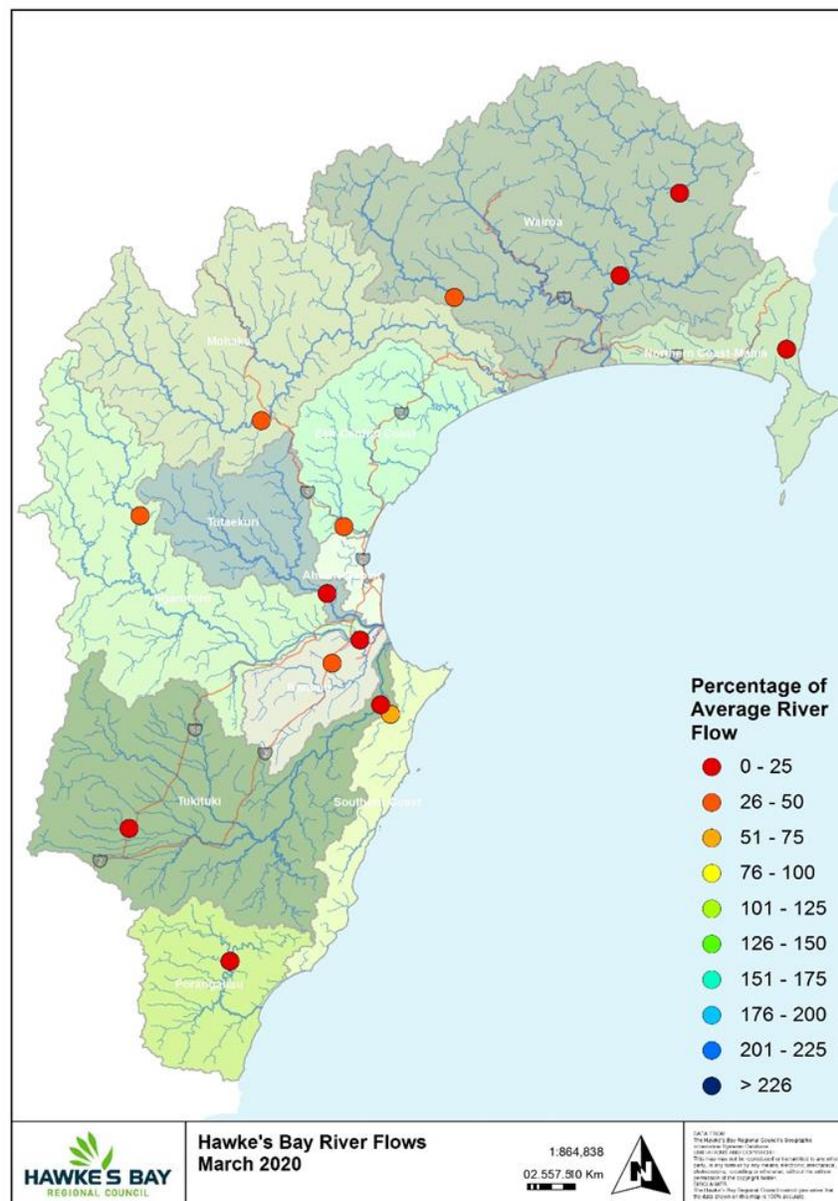
Location: Taharua



## RIVER FLOW

Percentage of average March flows  
for areas in the region:

Northern Coast – Mahia	14%
Northern HB – Hangaroa River	14%
Northern HB – Wairoa River	22%
Northern HB – Waiau River	36%
Mohaka	37%
Esk-Central Coast	39%
Tūtaekuri	23%
Karamu	36%
Ngaruroro – Kuripapango	31%
Ngaruroro – Chesterhope	12%
Southern Coast	65%
Tukituki – Tukipo River	8%
Tukituki – Tukituki River	10%
Porangahau	0%
<b>Hawke's Bay Region</b>	<b>25%</b>



## GROUNDWATER & SOIL MOISTURE

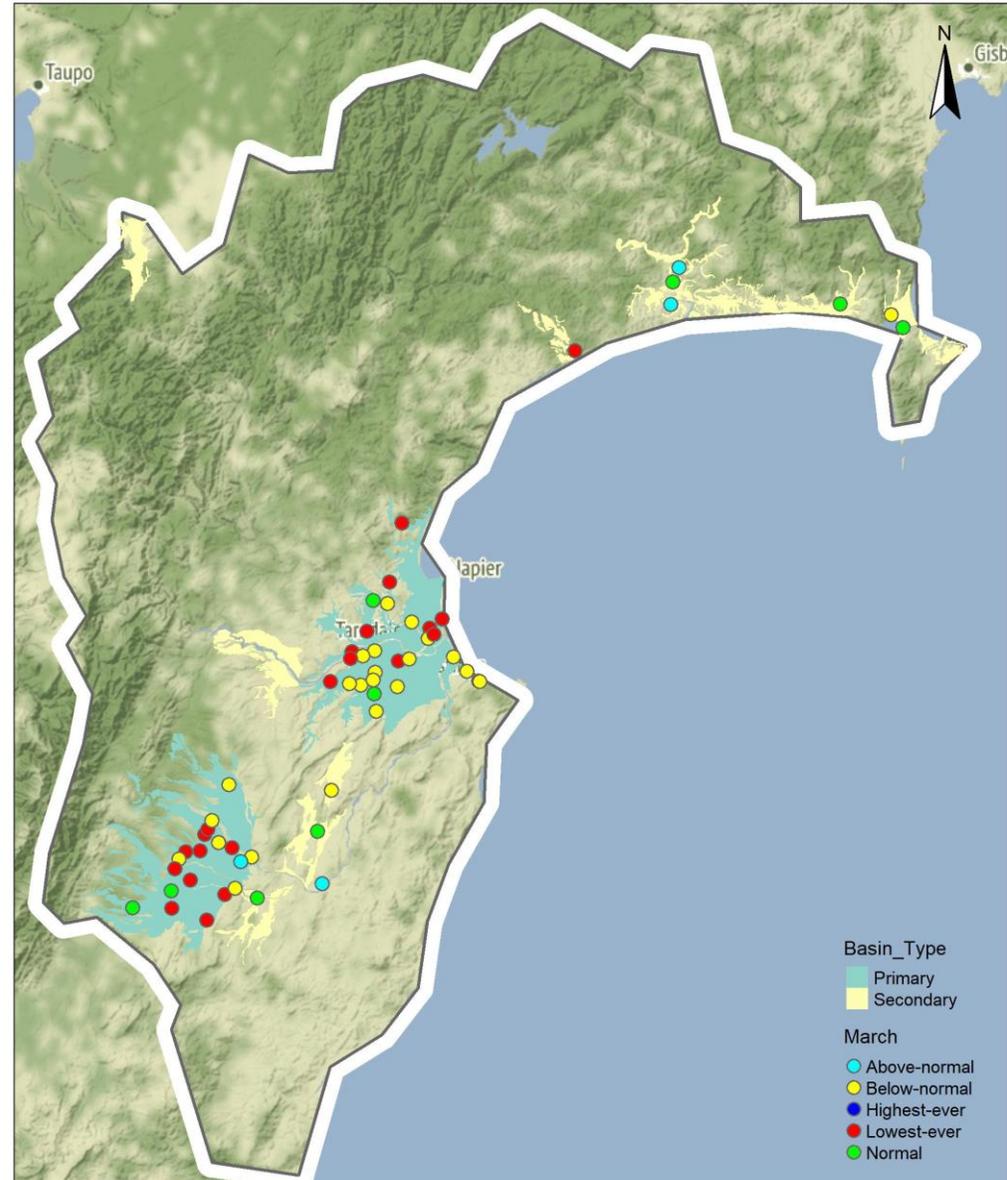
**Soil Moisture:** Below normal except in northern areas.

### **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.



## Recreational Water Quality

March brought an end to another successful recreational water quality season.

The lack of rainfall again meant the majority of sites breezed through with a 100% 'suitable for swimming' record in March.

There of course were a few exceptions which were the same coastal lagoons and streams that have exceeded throughout the season.

While March as a whole was a great time for a dip, the water temperatures will have likely dropped away once the isolation period is over and the togs will be in hibernation until November, when the season kicks off again.



## LONGER FORECAST

The El-Niño Southern Oscillation remains in neutral mode and looks to remain that way through winter and possibly into spring. The window is fast closing on the tropical cyclone season – finishing at the end of April and ending that threat/promise.

Pressures are looking lower than normal over southern New Zealand, which brings a westerly flow to the region. Potentially a flow not short of rain bands embedded in it but it's not a direction that instils great confidence we'll reap significant benefit.

The late autumn, early winter temperatures mightn't be too shabby as a result.

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