



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

September 2020

  
**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## September 2020

Our rainfall hit the bullseye – 100% of average September rainfall. We were a poor shot otherwise, with a lax hand that tended to hit low.

Buoyed by good rainfall in the north and south of the region and in the Ruahine Range, I expected good things from our other water stocks. Yeah, nah. September river flows were stubbornly low because soils were stubbornly frugal with the water they held, which wasn't that stunning anyway. Soil moisture levels at northern sites were near normal but Central Hawke's Bay's kept waltzing around the lowest 10<sup>th</sup> percentile of readings for the time of year. Groundwater seemed disinterested in doing anything other than meander along at mostly below normal levels.

In contrast, westerly gusts flailed our arms and our aim high when gunning down our temperatures, and basically just served to dry our armpits. We're very much relying on La Niña being sufficient ammunition to get those westerly winds to back off.

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

## SUMMARY September 2020

A pass mark for rain and a top grade for warmth.

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

### October to December Forecast.

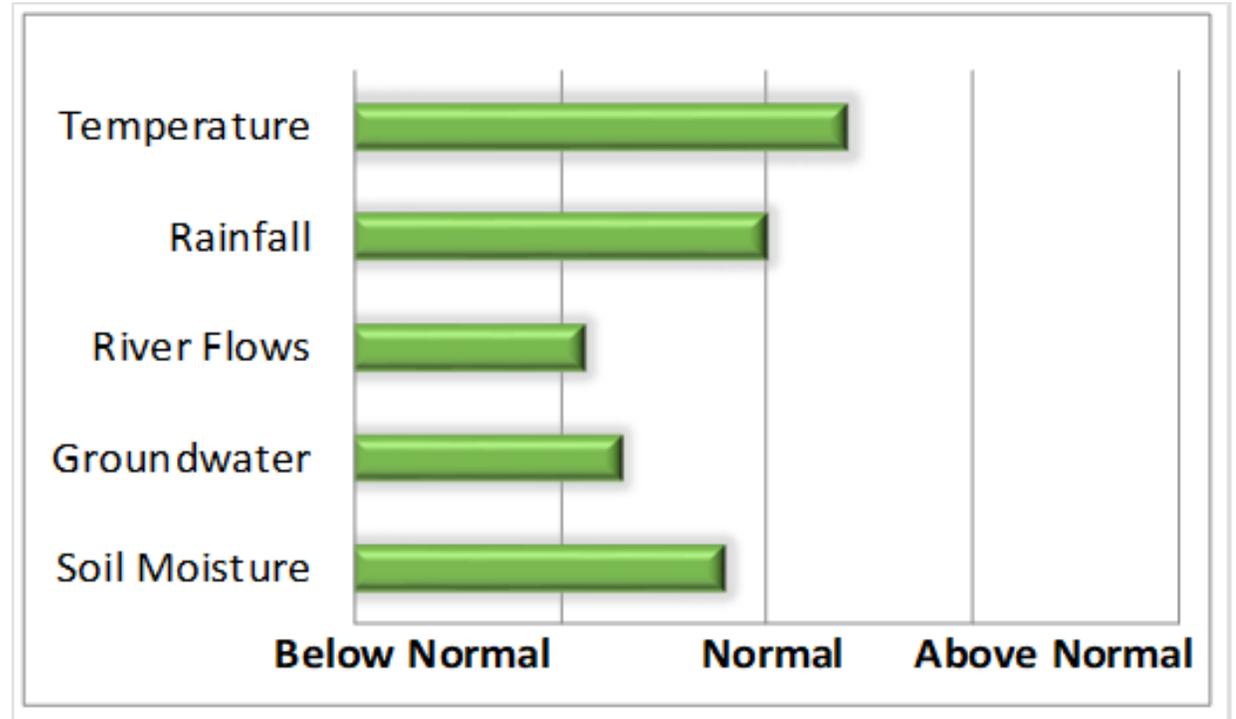
Temperature Above average  
Rain Near normal  
River flows Below normal  
Soil moisture Below normal

*source : NIWA*

For more information

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

P: 06 835 9200



## RAINFALL

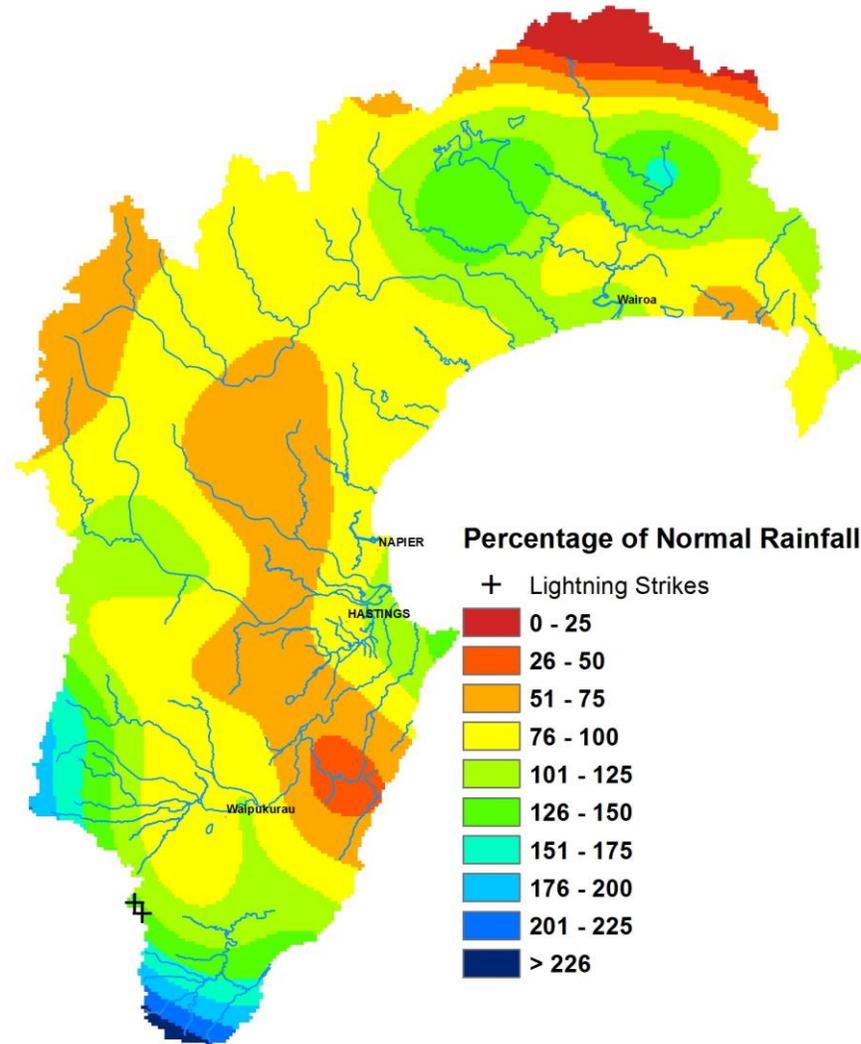
On target. Two cloud to ground lightning strikes.

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

Percentage of normal September rainfall  
(30 year average)

### For areas in the region:

Waikaremoana	106%
Northern HB	105%
Tangoio	73%
Kaweka	89%
Ruahine	139%
Heretaunga Plains	78%
Ruataniwha Plains	89%
Southern HB	117%
<b>Hawke's Bay Region</b>	<b>100%</b>



## TEMPERATURES

Above average

Mean Difference from Normal

Maximum Temperature: 0.8 °C

Minimum Temperature: 0.4 °C

Mean Daily Maximum: 16 °C

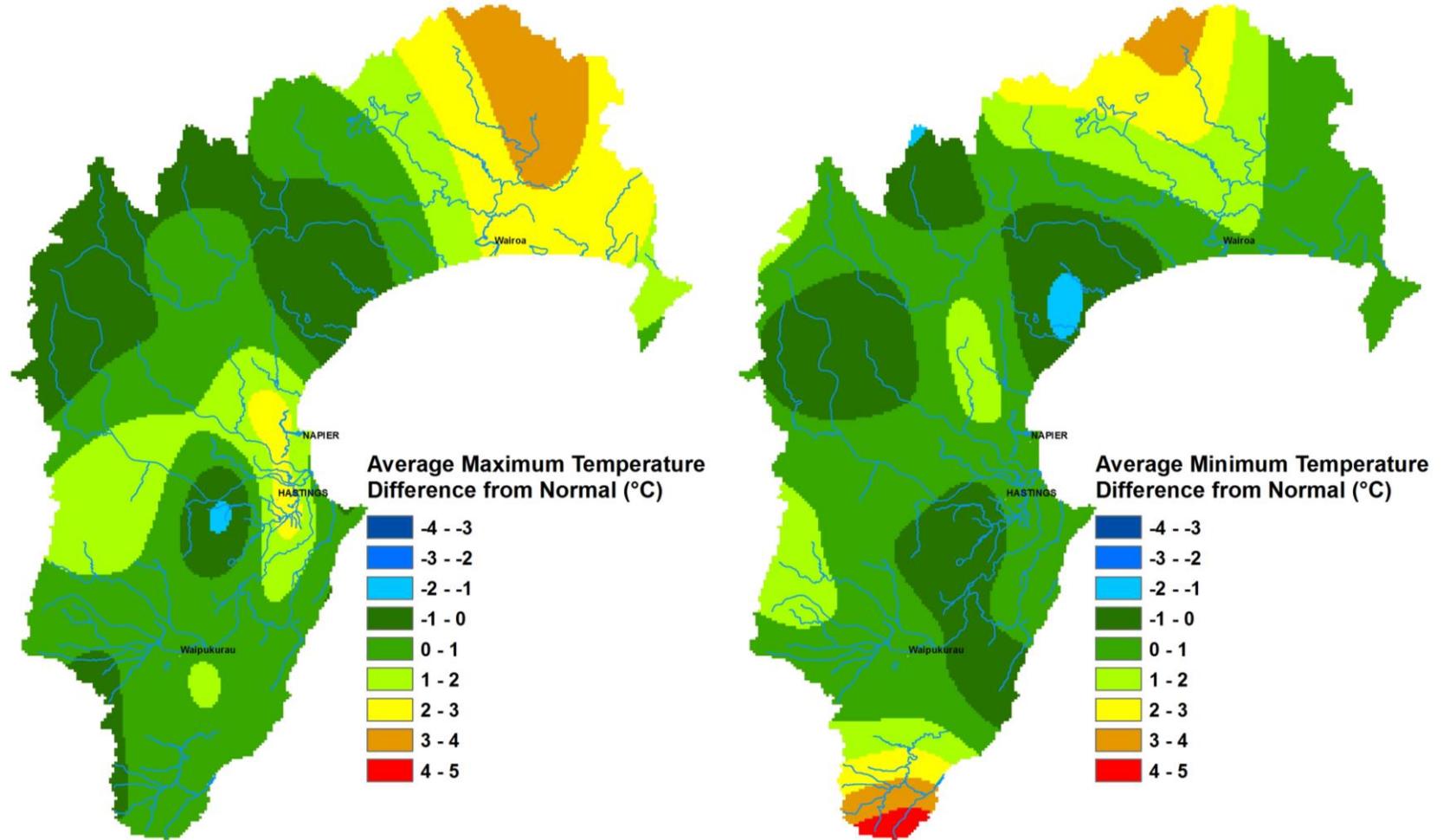
Mean Daily Minimum: 6 °C

Highest Daily: 23.8°C

Location: Wairoa North Clyde EWS

Lowest Daily: -4.8 °C

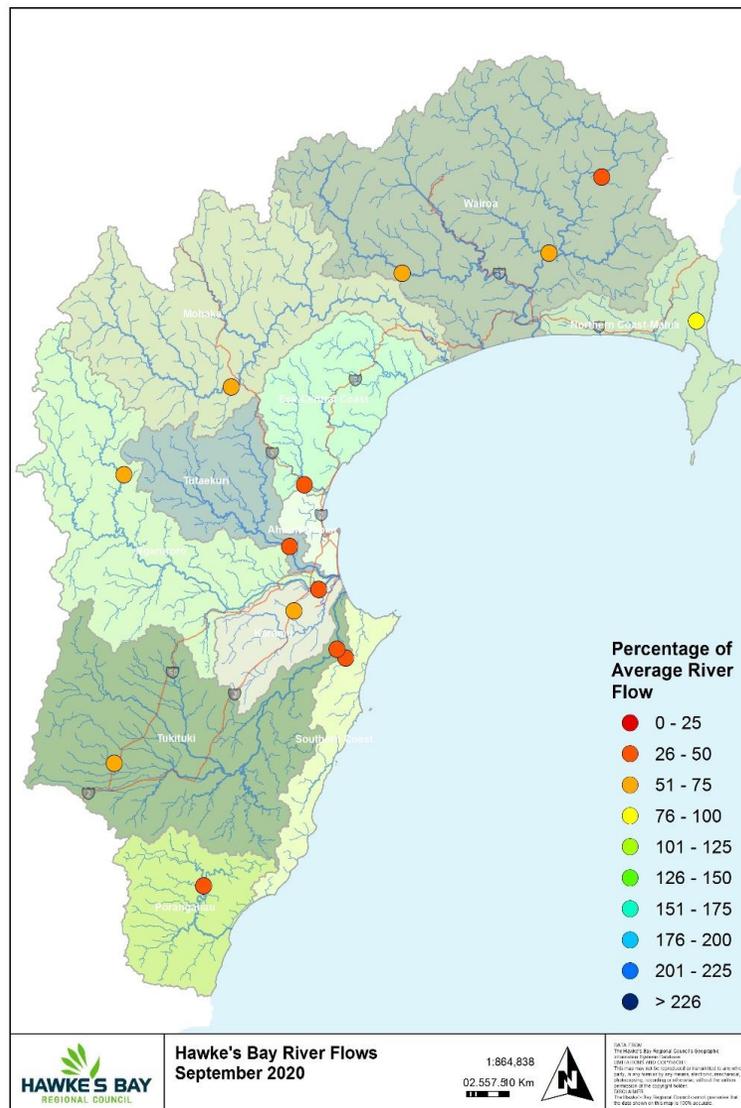
Location: Taharua



## RIVER FLOW

Percentage of average September flows for areas in the region:

Northern Coast – Mahia	76%
Northern HB – Hangaroa River	41%
Northern HB – Wairoa River	73%
Northern HB – Waiau River	71%
Mohaka	72%
Esk-Central Coast	48%
Tūtaekuri	37%
Karamu	63%
Ngaruroro – Kuripapango	70%
Ngaruroro – Chesterhope	36%
Southern Coast	49%
Tukituki – Tukipo River	72%
Tukituki – Tukituki River	43%
Porangahau	31%
<b>Hawke's Bay Region</b>	<b>56%</b>



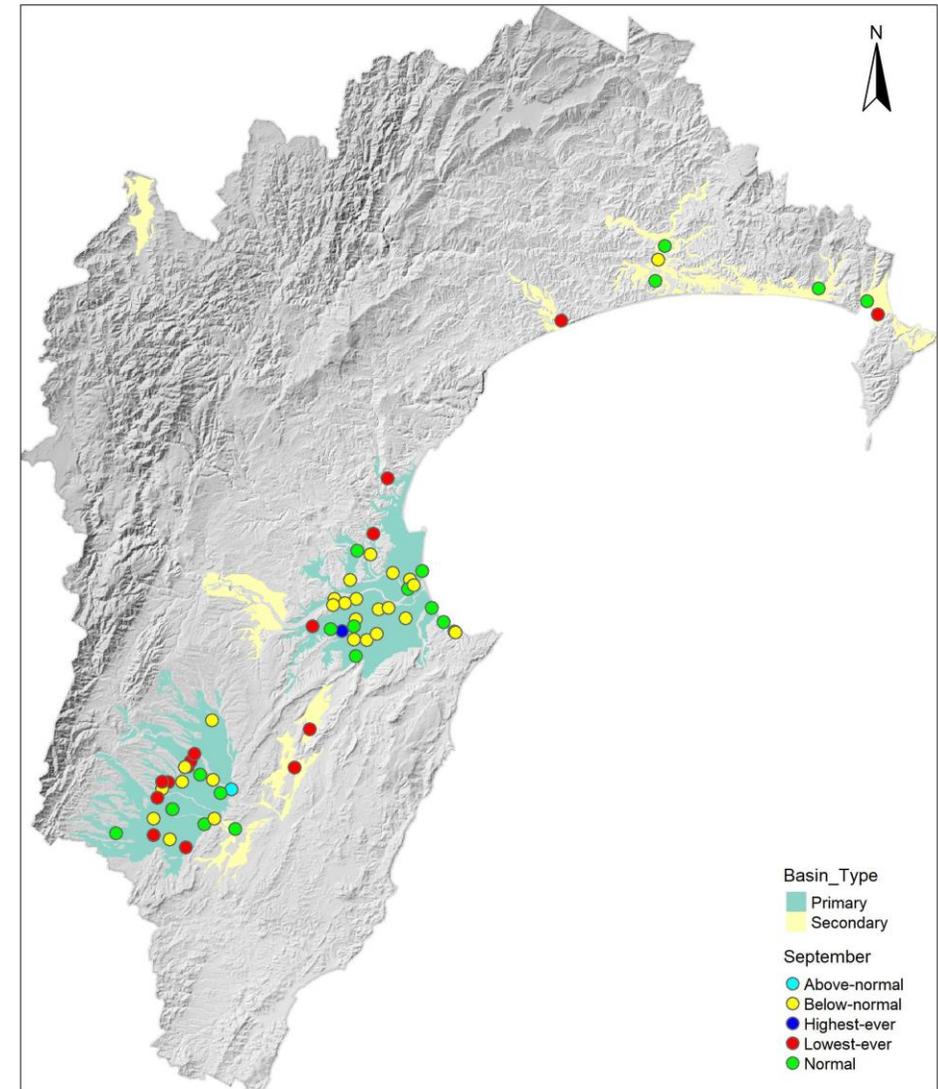
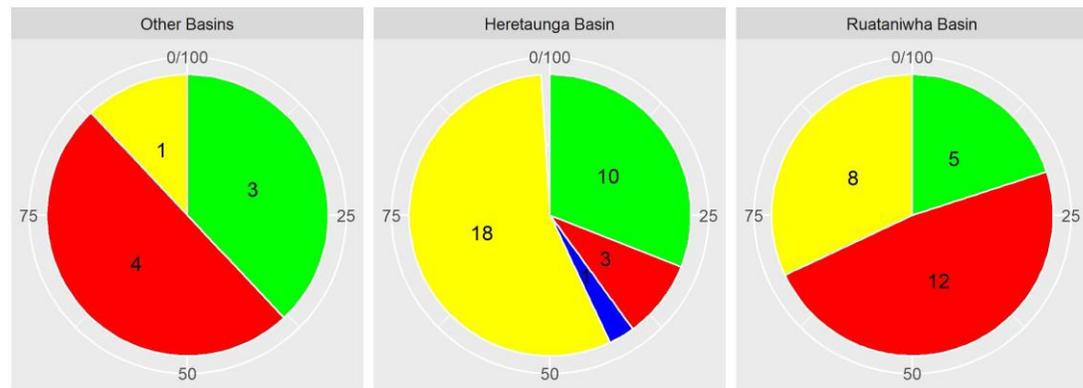
## GROUNDWATER & SOIL MOISTURE

**Soil Moisture:** Mostly below normal but near normal in the north.

### Current state of Groundwater levels:

This report compares groundwater levels in September 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.



## LONGER FORECAST

On the bright side, La Niña is here and we should see an easterly flow exert more of a presence as spring progresses.

Sea levels pressures are expected to be higher than normal to the southeast of us and lower in the northwest which sets up an onshore flow over the region. Sea and air temperatures are expected to be warmer than usual which raises potential for visits of moisture laden air.

The outlook for rainfall over the next three months is therefore encouraging, with seasonal models depicting near or even above normal rainfall for northern parts. Near normal rainfall is favoured for southern areas but there is a wary glance at a couple of models that suggest that anticyclonic conditions in the southeast stretch their influence into the region. That could produce a rainfall split of north haves and south have-nots. I'm mindful too that MetService expects a dry October despite an increase in easterlies, describing the latter as "fairly benign-looking" and that seems the prospect to start at least.

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