



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

NOVEMBER 2019

  
**HAWKES BAY**  
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## November 2019

normally I kick off by dissecting the nuances of the month's rainfall, like it was interesting. And November's rainfall was as worthy as any of my usual fixated spiel. But trumping everything this month were the stonking November temperatures.

Our sites didn't necessarily hit their record temperature for a November day, but they did break (albeit short) records for the month's average maximum temperature, which collectively across the region hit a mighty 3.4°C above normal. They reached the sort of averages we see in January and February.

Rainfall was meagre, amounting to less than half the November average and on top of that, the heat and a smattering of wind sucked it all out of the ground. Our calculations of potential evapotranspiration were the highest for November that we've seen in the relatively short history of our recording. River flows have taken a hit.

Soil moisture is still holding up in some places but diving in others, such as southern parts of Hawke's Bay. Water quality at our recreational bathing spots was in some cases pleasantly surprising so taking a dive, in that sense, got the thumbs up.

Groundwater levels reflect October's bumper rainfall so watch this space next month... that rainfall looks like early Christmas dolly that we've snapped the legs off and dumped beneath the sofa already.

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

## SUMMARY November 2019

Hot. Like mega hot. Not to mention 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.*

### December to February Forecast.

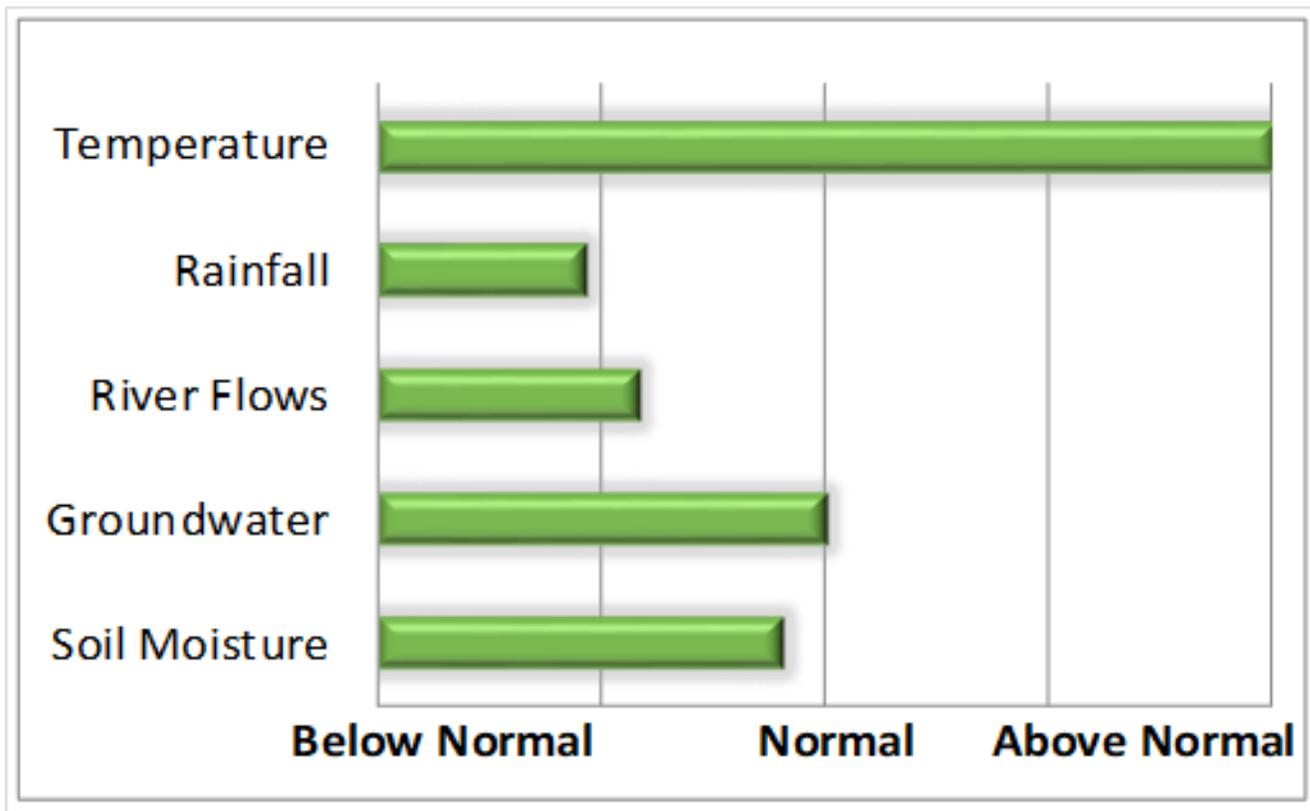
Temperature	Above average
Rain	Near normal
River flows	Near normal
Soil moisture	Near normal

*source : NIWA*

For more information

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

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## RAINFALL

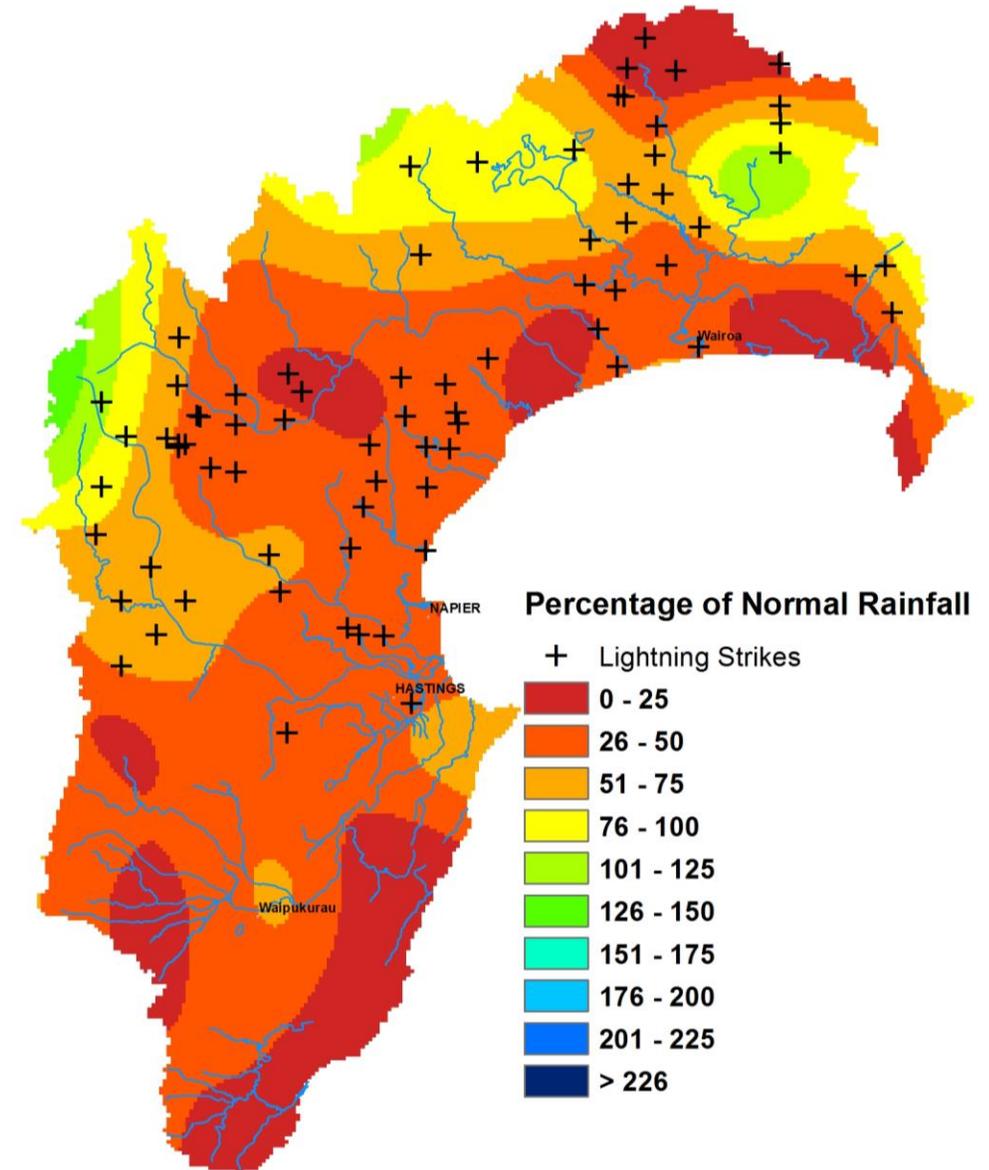
Scant, well below normal. 74 cloud to ground lightning strikes.

Percentage of normal November rainfall  
(30 year average)

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

### For areas in the region:

Waikaremoana	69%
Northern HB	43%
Tangoio	38%
Kaweka	62%
Ruahine	34%
Heretaunga Plains	35%
Ruataniwha Plains	37%
Southern HB	29%
<b>Hawke's Bay Region</b>	<b>43%</b>

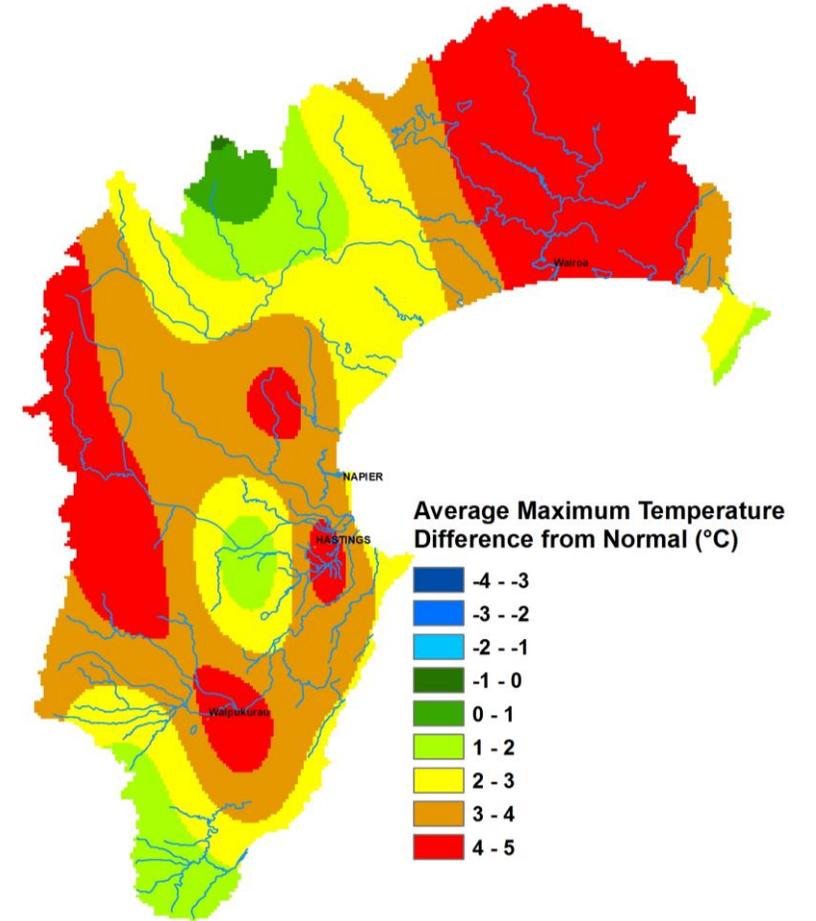
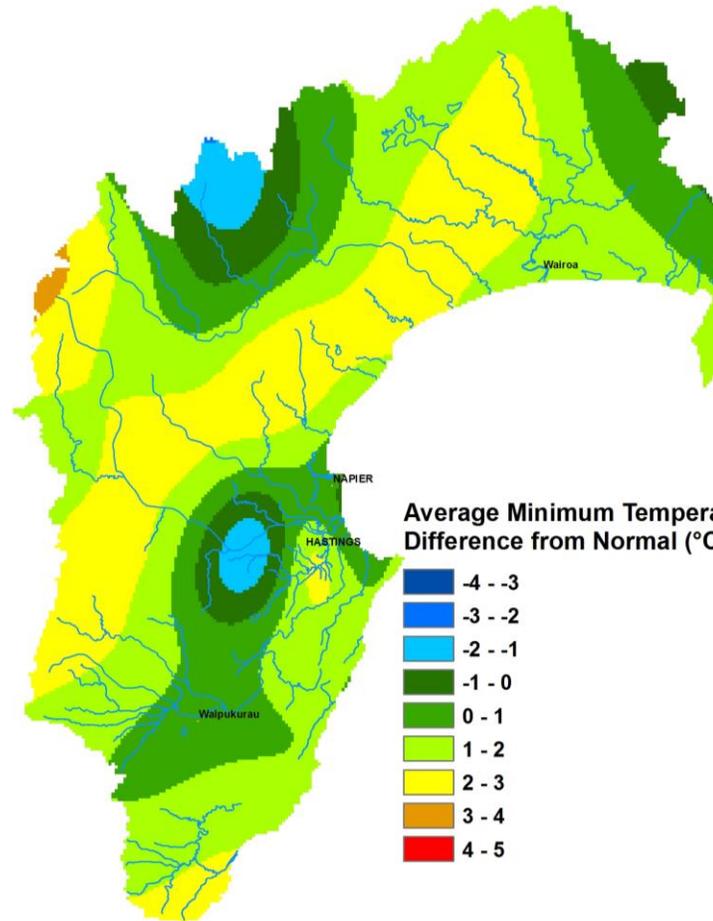


## TEMPERATURES

Outrageous.

Mean Difference from Normal  
Maximum Temperature: 3.4 °C  
Minimum Temperature: 1.4 °C

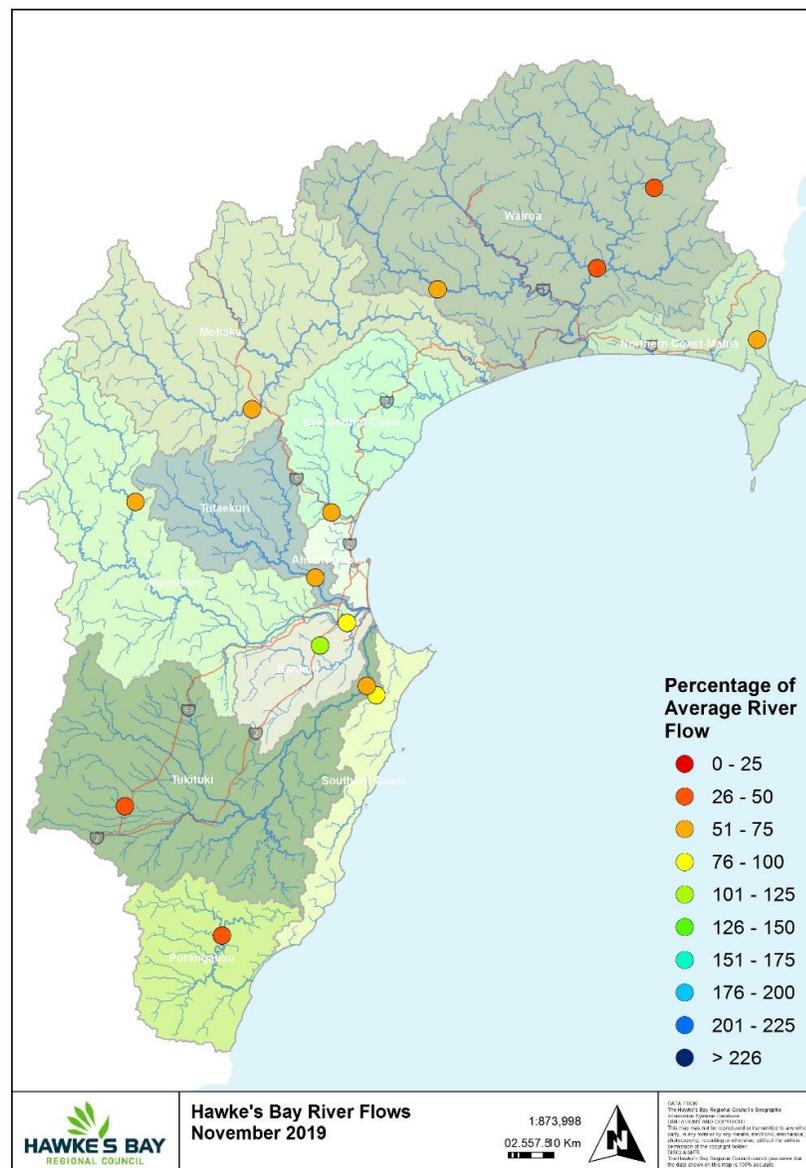
Mean Daily Maximum: 22 °C  
Mean Daily Minimum: 10 °C  
Highest Daily: 34.1°C  
Location: NIWA's Wairoa North Clyde EWS  
Lowest Daily: 0.4 °C  
Location: Taharua



## RIVER FLOW

Percentage of average November flows  
for areas in the region:

Northern Coast – Mahia	52%
Northern HB – Hangaroa River	44%
Northern HB – Wairoa River	33%
Northern HB – Waiau River	54%
Mohaka	54%
Esk-Central Coast	66%
Tūtaekuri	71%
Karamu	104%
Ngaruroro – Kuripapango	74%
Ngaruroro – Chesterhope	82%
Southern Coast	89%
Tukituki – Tukipo River	41%
Tukituki – Tukituki River	55%
Porangahau	40%
<b>Hawke's Bay Region</b>	<b>61%</b>

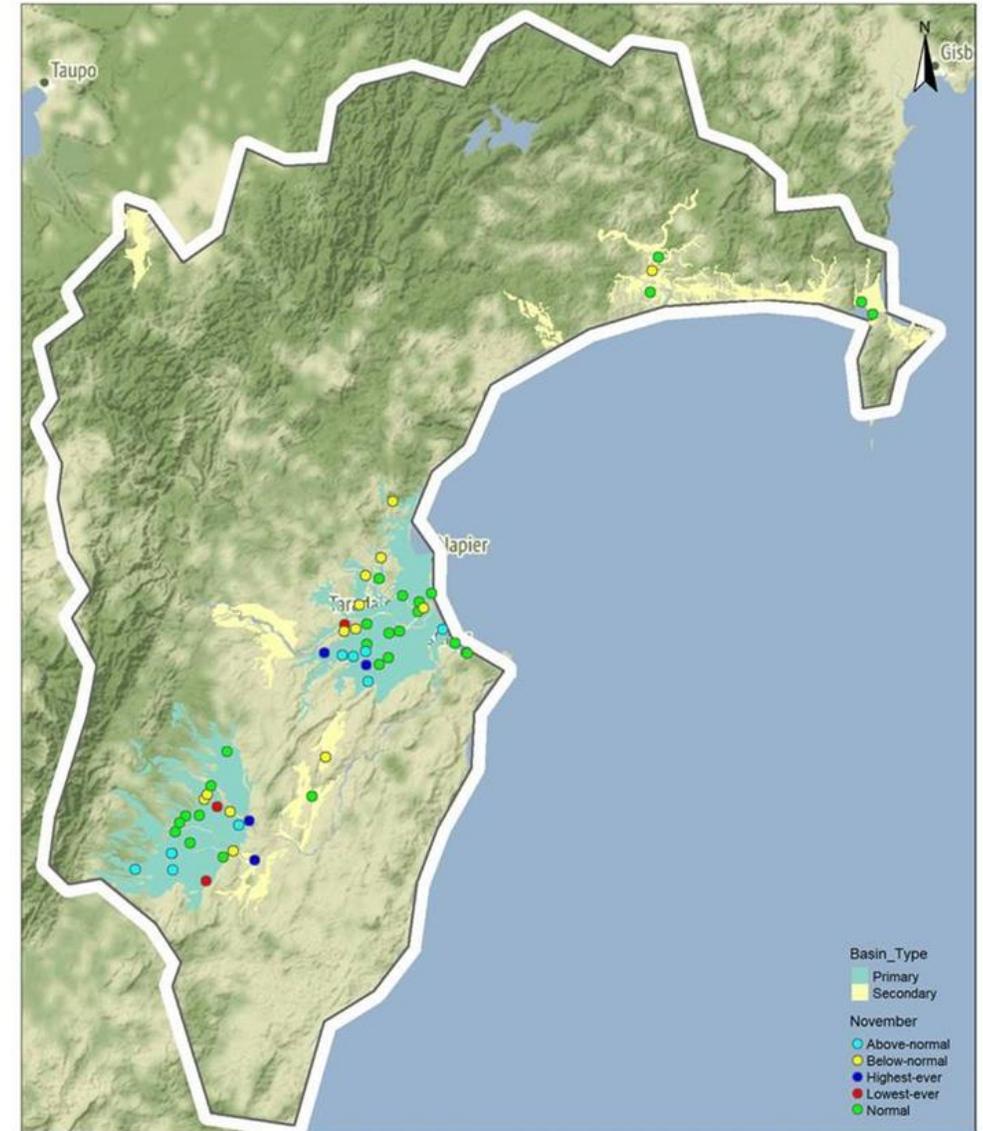
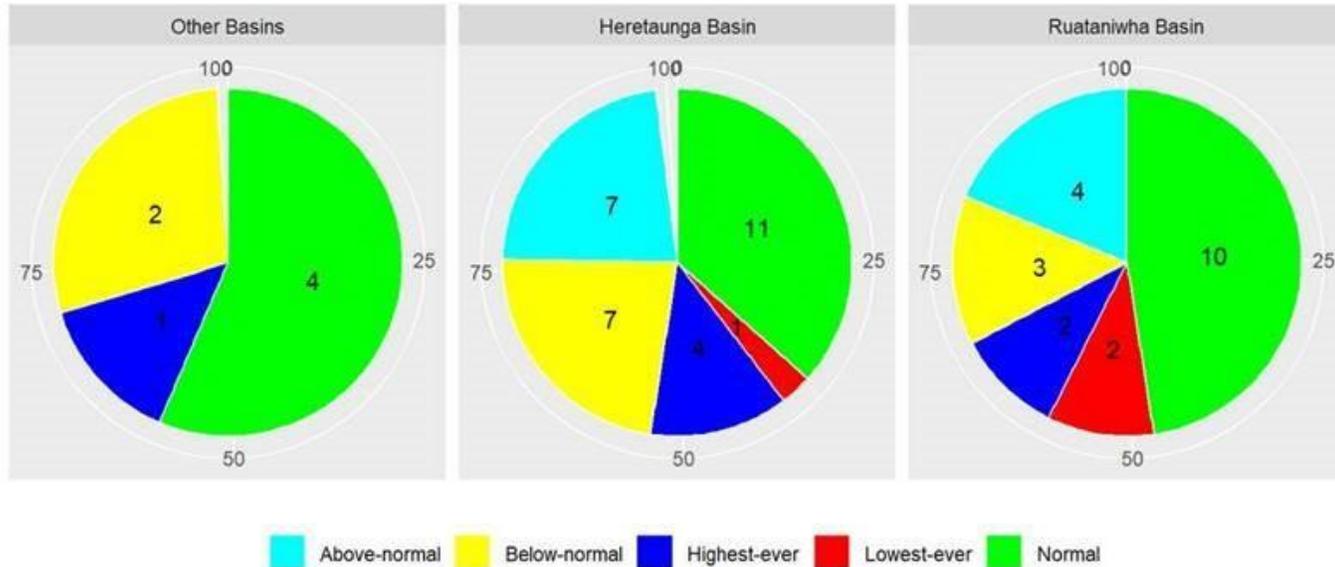


## GROUNDWATER & SOIL MOISTURE

**Soil Moisture:** Mostly normal or below normal

### Current state of Groundwater levels:

This report compares groundwater levels in November 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

The Rec Water season is back underway, with the 20 week sampling program starting on November 4<sup>th</sup>.

The region was dry throughout November which meant there were few exceedances related to rainfall. The usual suspects (coastal lagoons and rivers) were the main culprits, making up over 70% of the total November exceedances.

A couple of the sites from last season that had near constant 'unsuitable for swimming' quality have started with a clean sheet this season which is positive news! Phormidium monitoring has also begun on the Tukituki River with some sites having exposed or detached mats, resulting in a red alert status at these sites.

Our students are busy learning the runs so they can help carry out sampling over the upcoming Christmas/New Year break.



## LONGER FORECAST

The El Niño-Southern Oscillation is in neutral mode so it is unlikely to be a player in our summer weather. Sea temperatures have been above average and the outlook for our air temperature is to continue being warmer than usual.

The general pattern is for the westerlies to remain with us for December but easing after that and probably taking on more of a northerly bent.

The models are variable in how much rain they want to give us, with a number of them going for close to normal summer totals. One respected model has pressures higher than normal over us for the summer and rainfall lower than normal , so that is something to keep in mind during our holiday frolics.

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

### **MPI comment for HBRC SOE November 2019**

Hot, dry and windy conditions are quickly eroding the benefits of the excellent rainfall in mid-October. In terms of pasture covers and feed levels, the season is running about average for this time of year; but rain is needed to maintain the momentum of spring on pastoral farms.

Young fodder and arable crops in particular, would benefit. Late-drilled feed crops have not struck well with little rain since sowing.

An unusually severe hailstorm in parts of the Heretaunga Plains and towards Bay View on 1 October had a significant impact on stone fruit, particularly plums, apricots and early nectarines. There were also patchy impacts on some grape varieties. A short hail event on 12 November affected some apple crops – it is anticipated that most of the damaged fruit will be removed during fruit thinning which is getting underway.

Above average temperatures and high sunshine hours during November have helped fruit growth; this is welcomed by apple growers following a delayed start to flowering due to a cool early spring. Weather conditions have also been favourable for flowering in grapes.

Lamb growth rates picked up with the hotter weather. Farmers are very pleased with early prime lamb prices above \$150, cull ewes getting similar prices and a high beef schedule. Some nervousness about the seasonal outlook led to an increase in store lambs coming onto the market at the end of November and the prices fell quickly by about 70c/kg (around \$25 per head). Dairy cows are in good condition and milk production is still running ahead of last year.

There is optimism about the forecast milk payout and a lot of very good quality silage has been made.

**Gillian Mangin and Annette Carey**