



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

OCTOBER 2019



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

October 2019

October began in rollicking fashion with an epic hailstorm and ended with an epic fail in sporting success (all HB and NZ teams I followed over Labour weekend lost – seven of them!).

The good folk at MPI inform us that the storm had significant effects on summerfruit while some vineyards growing early grape varieties didn't escape scot free. Halfway through the month the real rain came, bringing the month's tally to more than double the October average for eastern areas.

River flows and soil moisture have hit levels well above normal for the time of year. Groundwater levels look woeful in comparison but they reflect data collected before mid-month so we expect the next report to paint a rosier picture... hopefully. Temperatures in the month were lame and while they were in the normal range they limped into it.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY October 2019

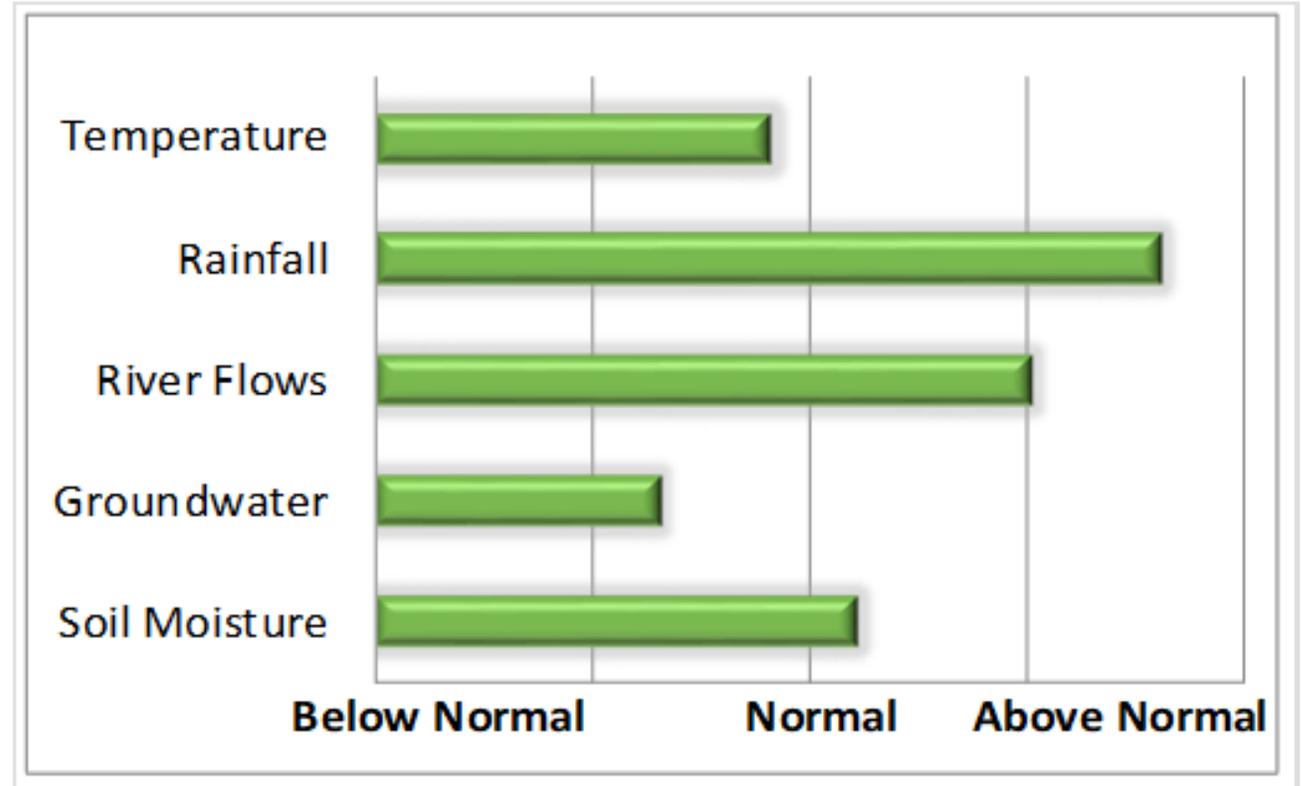
Very wet and lacklustre temperatures

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

November to January Forecast.

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

source : NIWA



For more information

www.hbrc.govt.nz

P: 06 835 9200

RAINFALL

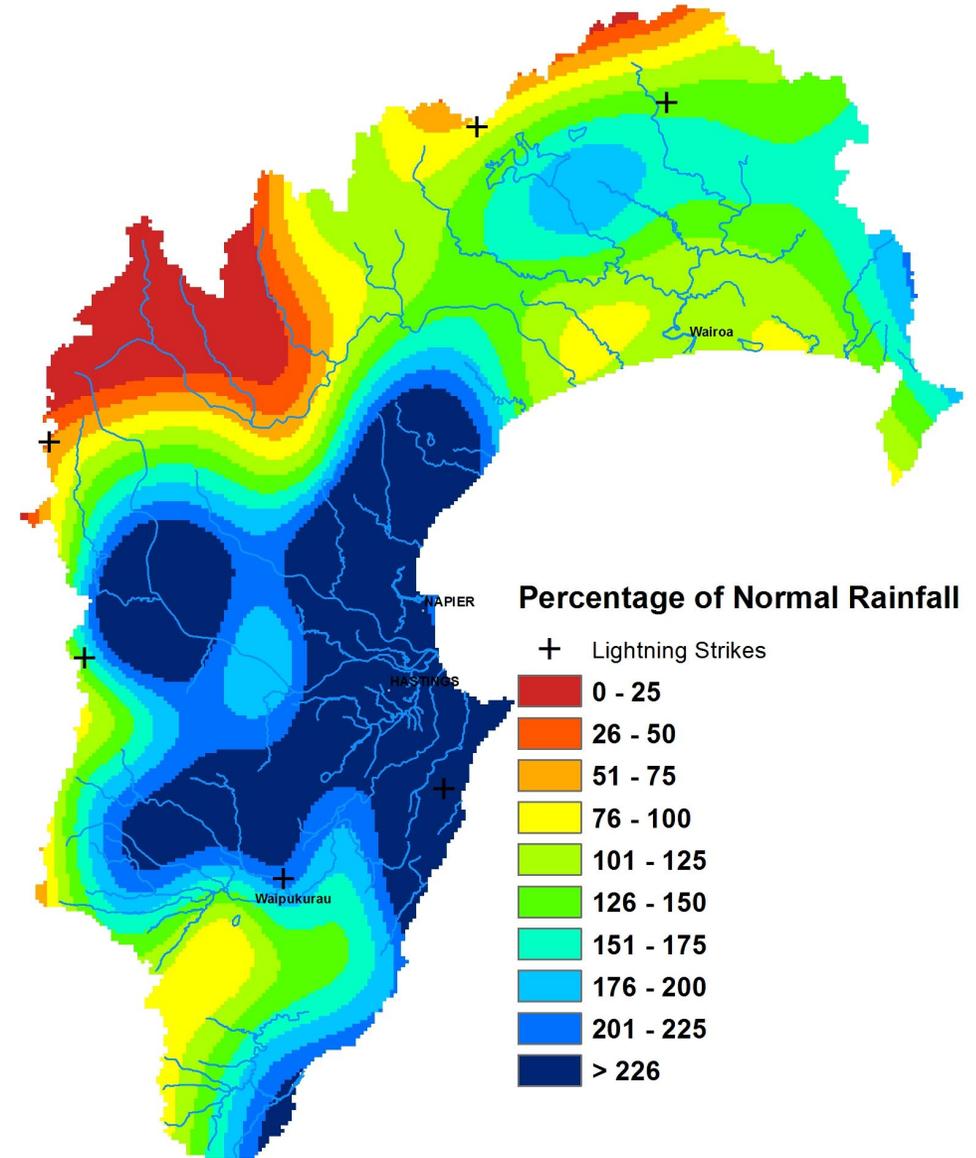
Well and truly above normal, especially for eastern areas.
Six cloud to ground lightning strikes.

Percentage of normal October rainfall
(30 year average)

Lightning counts come from the Blitzorgtung.org lightning network to which HBRC contributes. There were no cloud to ground lightning strikes recorded in the region in October.

For areas in the region:

Waikaremoana	121%
Northern HB	131%
Tangoio	234%
Kaweka	179%
Ruahine	141%
Heretaunga Plains	265%
Ruataniwha Plains	191%
Southern HB	212%
Hawke's Bay Region	184%



TEMPERATURES

Not stunning.

Mean Difference from Normal

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

Minimum Temperature: $-0.33\text{ }^{\circ}\text{C}$

Mean Daily Maximum: $17\text{ }^{\circ}\text{C}$

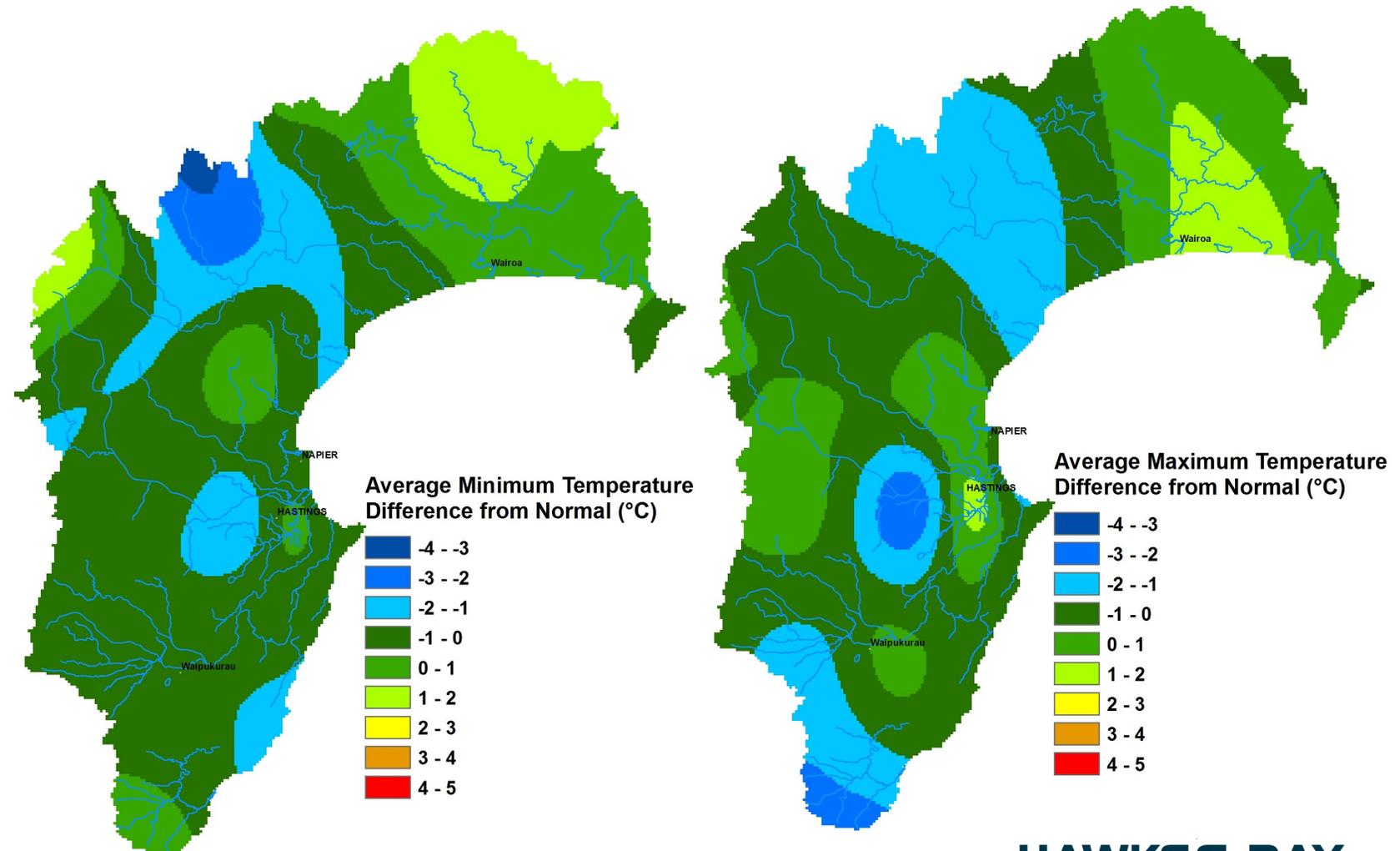
Mean Daily Minimum: $7\text{ }^{\circ}\text{C}$

Highest Daily: $28.7\text{ }^{\circ}\text{C}$

Location: Wairoa North Clyde EWS

Lowest Daily: $-2.3\text{ }^{\circ}\text{C}$

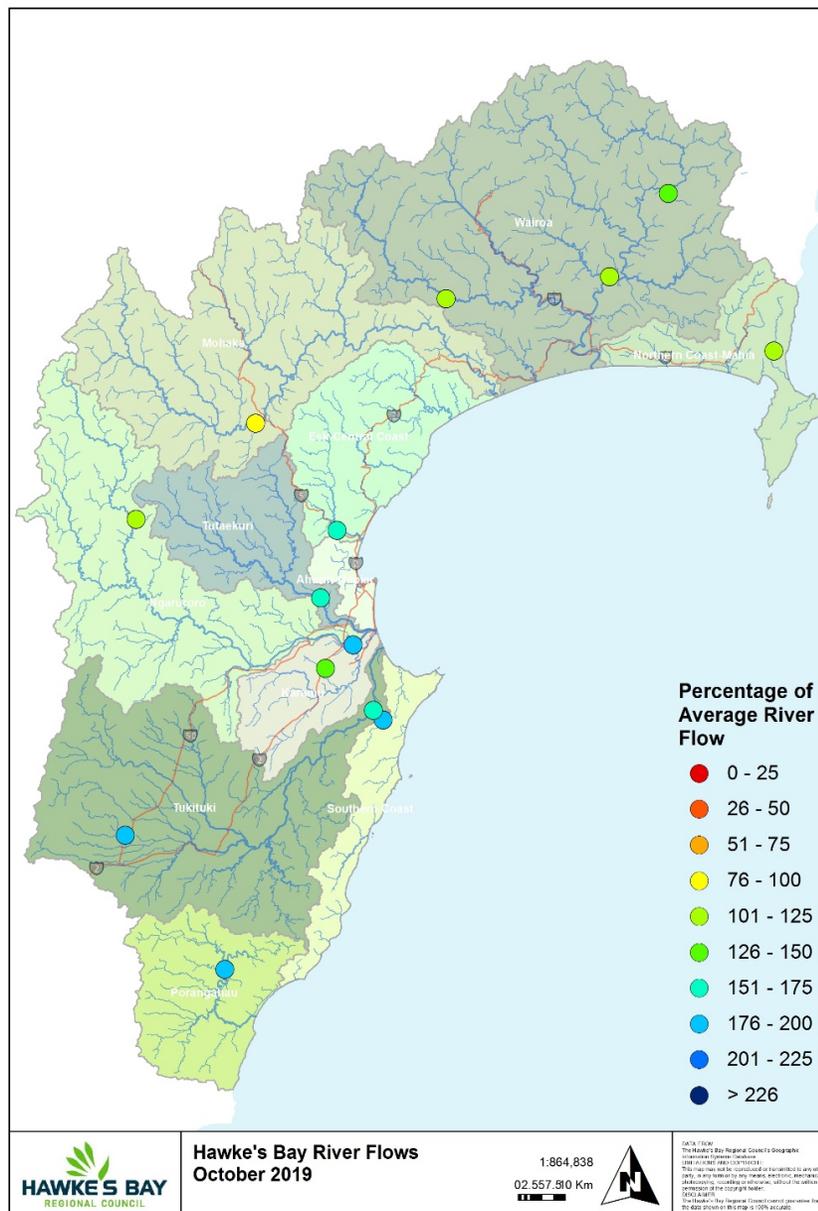
Location: Taharua



RIVER FLOW

Percentage of average October flows
for areas in the region:

Northern Coast – Mahia	112%
Northern HB – Hangaroa River	132%
Northern HB – Wairoa River	114 %
Northern HB – Waiau River	102%
Mohaka	85%
Esk-Central Coast	156%
Tūtaekuri	173%
Karamu	140%
Ngaruroro – Kuripapango	123%
Ngaruroro – Chesterhope	184%
Southern Coast	198%
Tukituki – Tukipo River	184%
Tukituki – Tukituki River	165%
Porangahau	183%
Hawke's Bay Region	147%

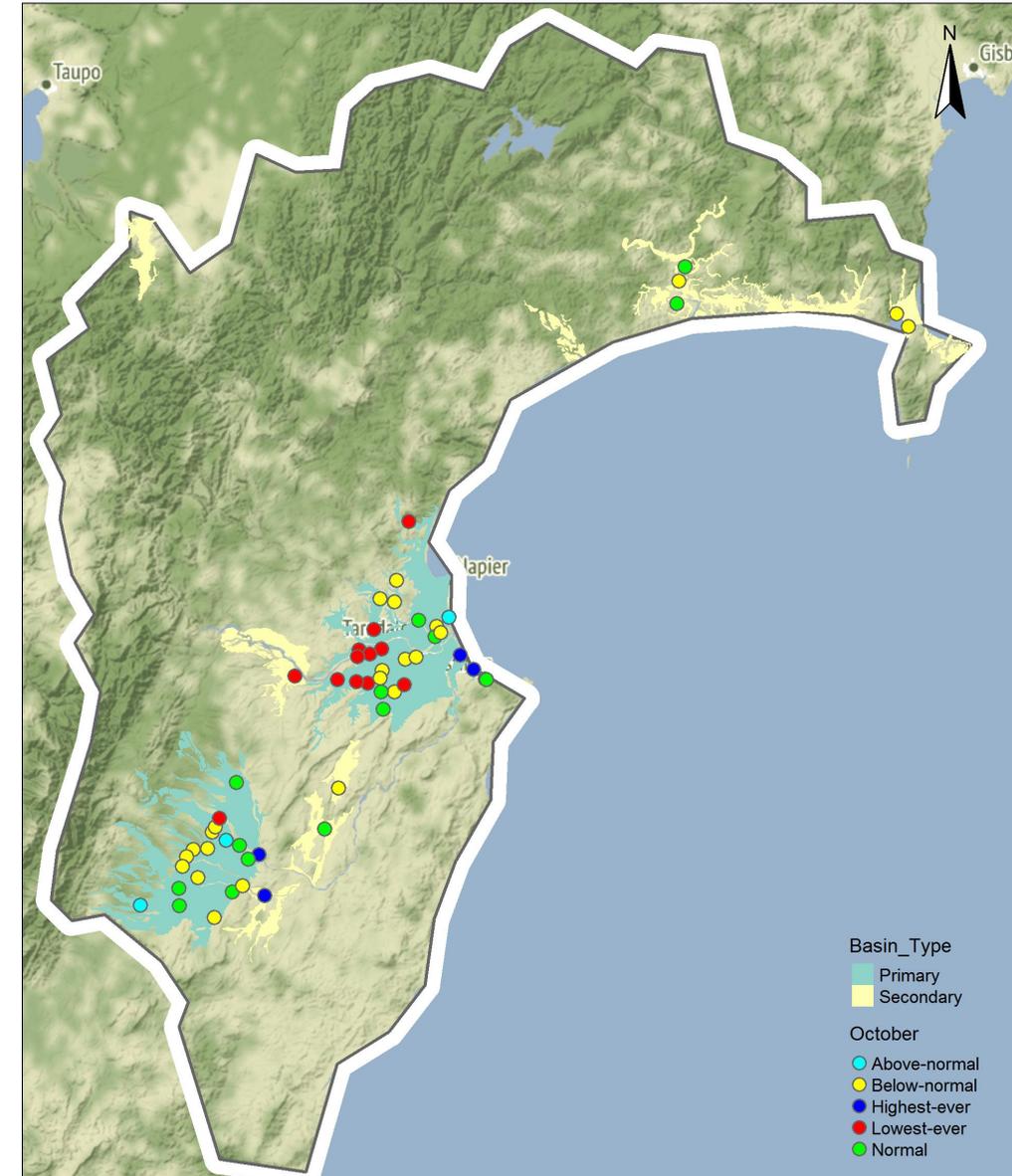
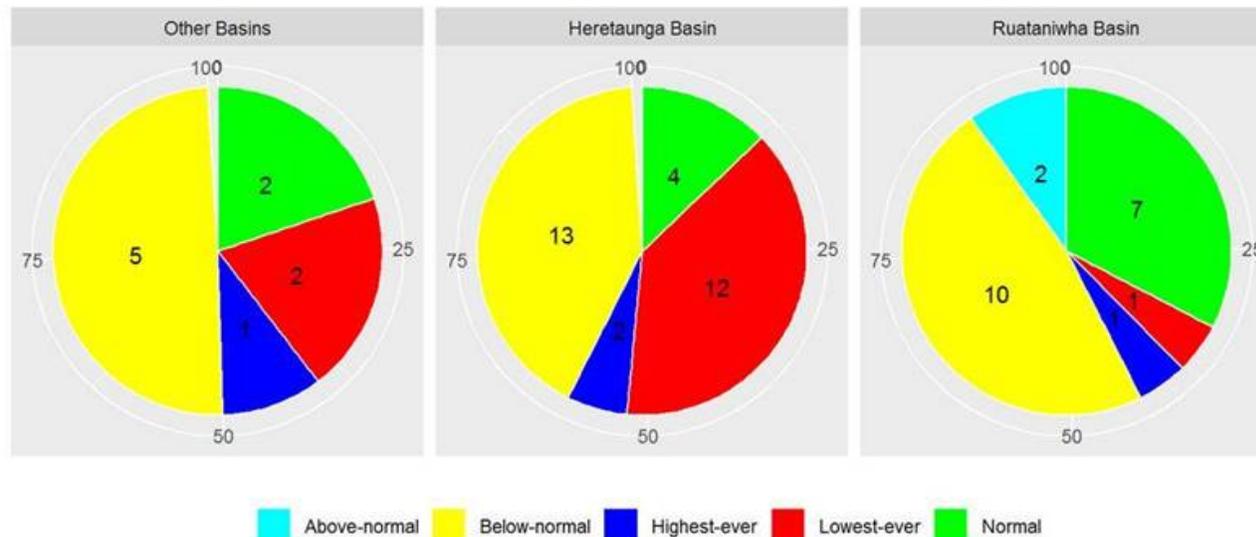


GROUNDWATER & SOIL MOISTURE

Soil Moisture: Above normal

Current state of Groundwater levels:

This report compares groundwater levels in October 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

A predominantly westerly flow looks set to remain for the next couple of months at least, due to a predicted pattern of lower than normal pressure over southern parts of the country and higher pressure to the north.

The seasonal models differ a bit on how far south or how far north those areas of high and low pressure reach respectively, which can make a difference to the rainfall forecast – either a tendency for the westerlies to be dry or loaded with frontal activity as they were in October.

At this stage the money is on a forecast of normal or below normal rainfall and normal temperatures.

Kathleen Kozyniak
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