



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

June 2022



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

June 2022

We're mostly normal folks. Rainfall was within the normal range for June – though weighted to the north and west and scarcer on the Plains and south coast.

River flows were in the normal range, groundwater levels were predominantly average for the time of year and soil moisture was a mix of near and above normal levels.

Temperatures strode above normal by 1-2°C but that didn't stop our air quality reverted back to normal. Sadly we had a PM₁₀ exceedance in Hastings on the Matariki holiday. So if you were out getting an eyeful of stars, you were treated to a lungful of muck. No exceedances in Hastings last year was one out of the box but it's something I hope we'll see ad infinitum.

Kathleen Kozyniak
Team Leader Marine Air and Land Science

SUMMARY June 2022

A repeat of May – average rain and nicely warm.

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

July to September Forecast

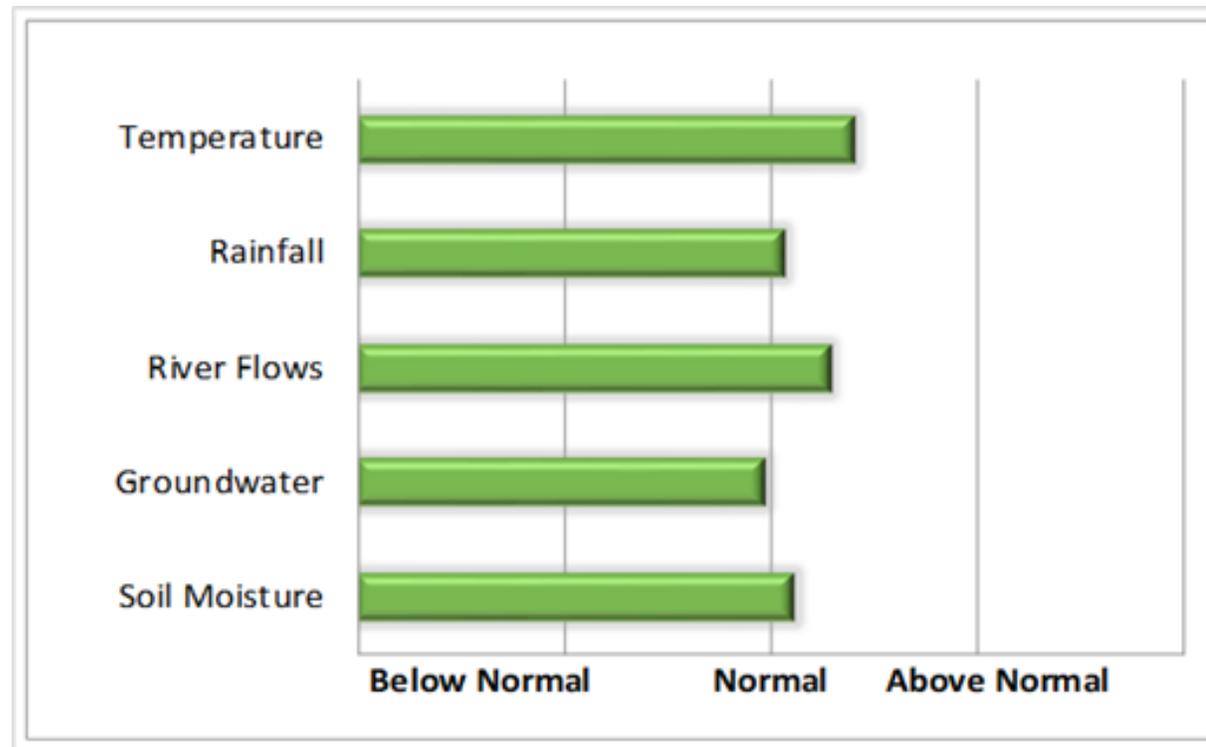
Temperature Above average
Rain Near normal
River flows Near normal
Soil moisture Near normal

source : NIWA

For more information

www.hbrc.govt.nz

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RAINFALL

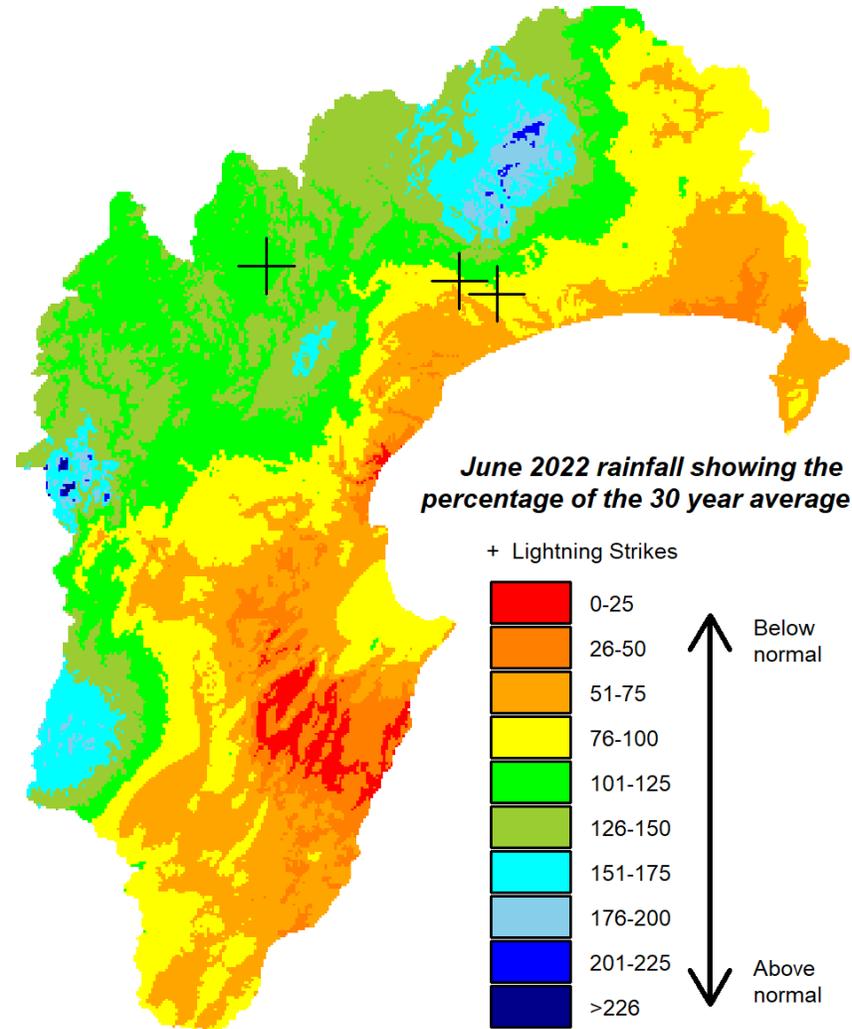
Plenty in the ranges but below average on the Plains and south coast. Three cloud to ground lightning strikes.

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

Percentage of normal June rainfall
(30 year average)

For areas in the region:

Waikaremoana	145%
Northern HB	82%
Tangoio	107%
Kaweka	139%
Ruahine	154%
Heretaunga Plains	62%
Ruataniwha Plains	71%
Southern HB	59%
Hawke's Bay Region	103%



TEMPERATURES

Warmer than usual days and even more so overnight.

Mean Difference from Normal

Maximum Temperature: 1.0°C

Minimum Temperature: 2.0°C

Mean Daily Maximum: 14 °C

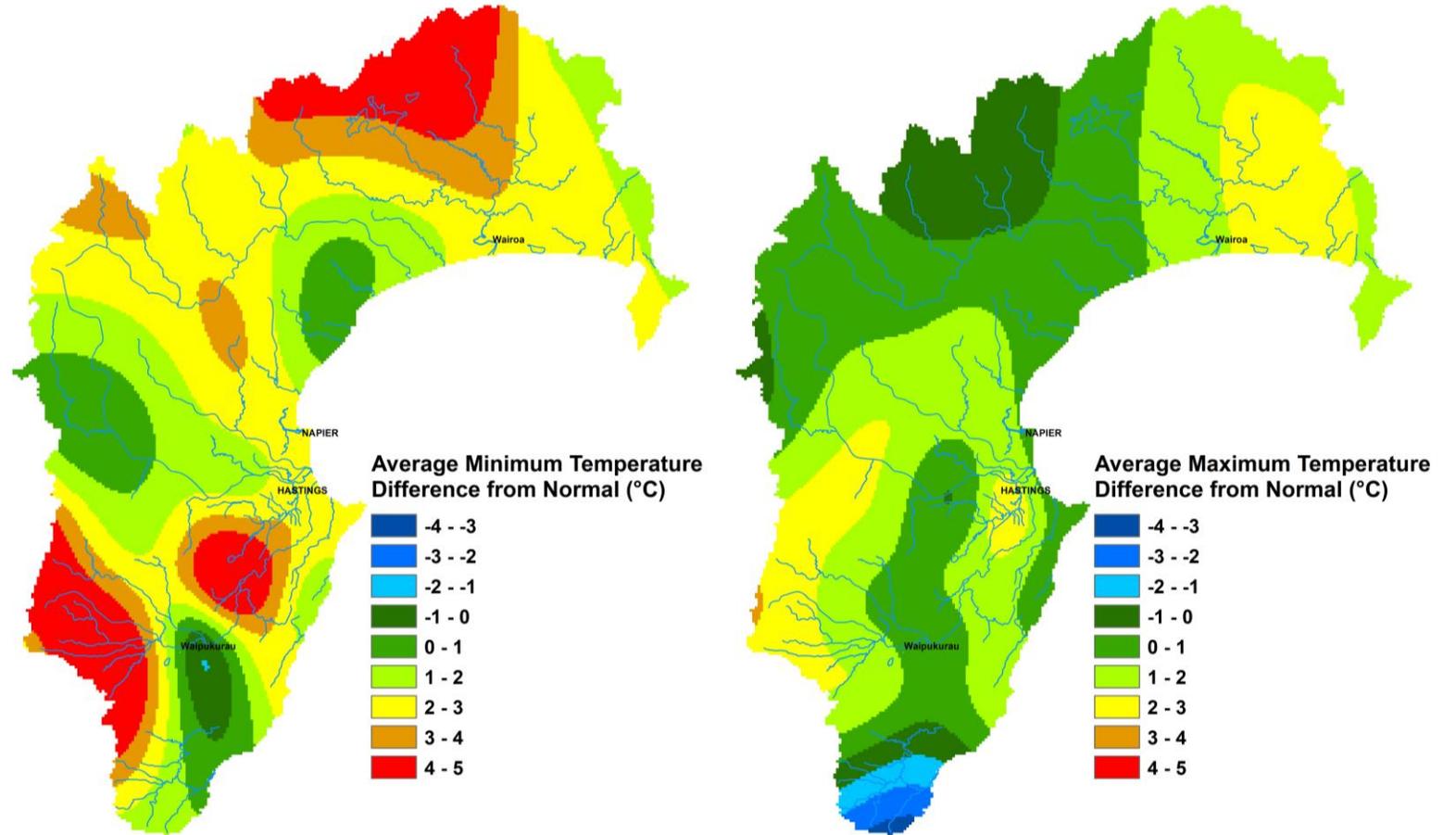
Mean Daily Minimum: 4°C

Highest Daily: 22.8 °C

Location: Hastings AWS (Metservice)

Lowest Daily: -3.2 °C

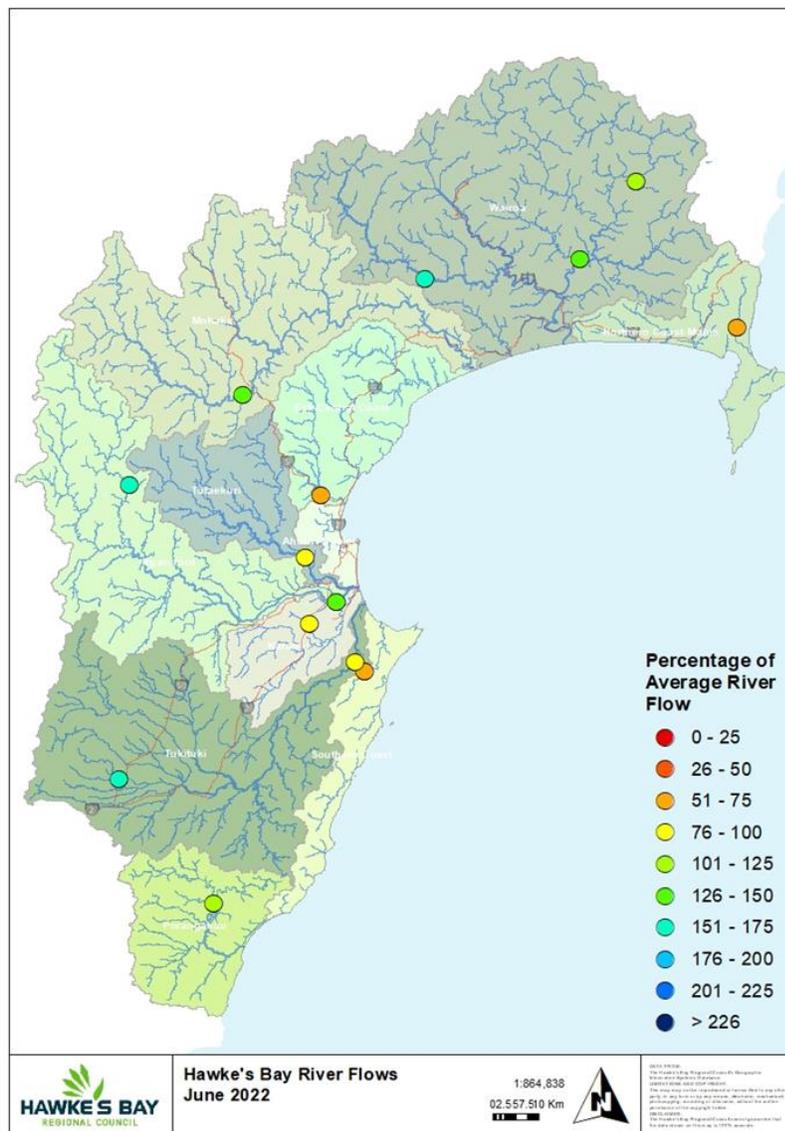
Location: Ongaonga Climate



RIVER FLOW

Percentage of average June flows
for areas in the region:

Northern Coast – Mahia	69%
Northern HB – Hangaroa River	120%
Northern HB – Wairoa River	127%
Northern HB – Waiau River	163%
Mohaka	150%
Esk-Central Coast	73%
Tūtaekuri	96%
Karamu	80%
Ngaruroro – Kuripapango	175%
Ngaruroro – Chesterhope	140%
Southern Coast	59%
Tukituki – Tukipo River	160%
Tukituki – Tukituki River	81%
Porangahau	110%
Hawke's Bay Region	115%



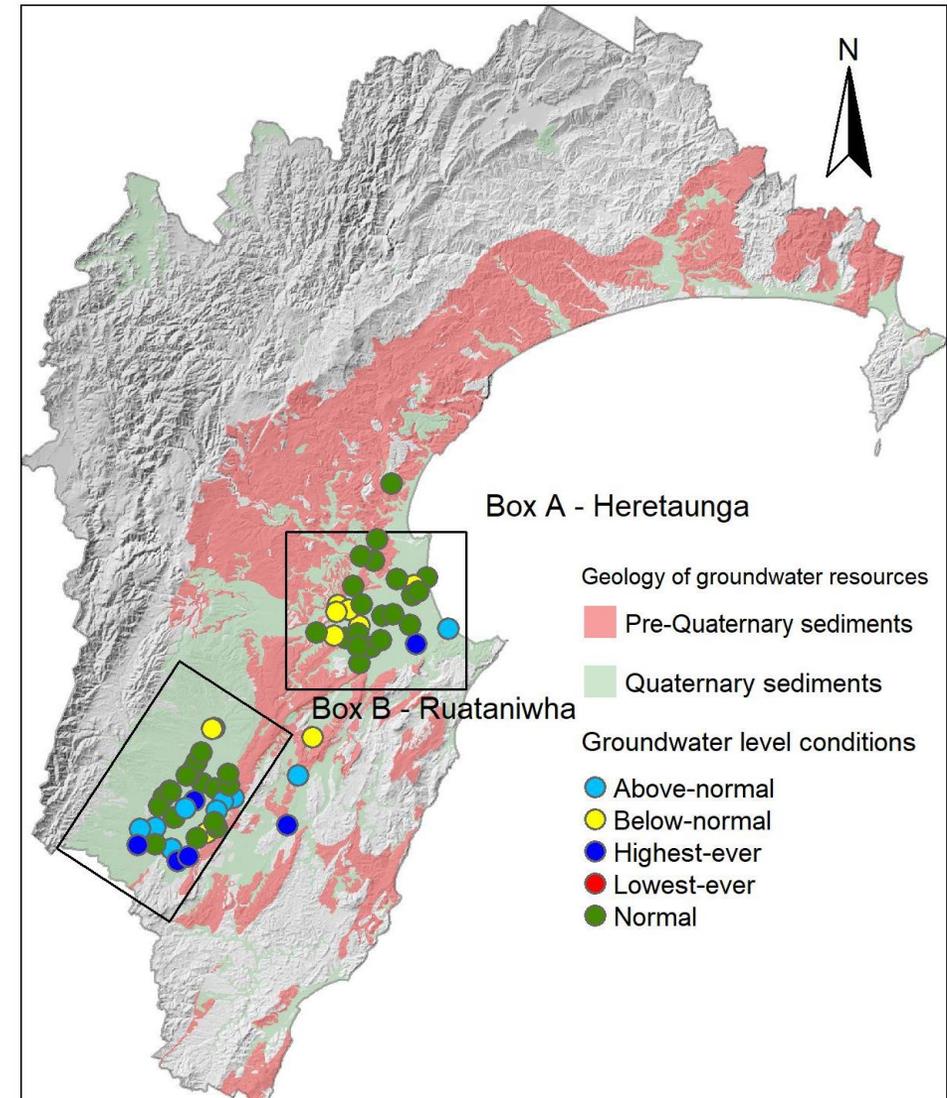
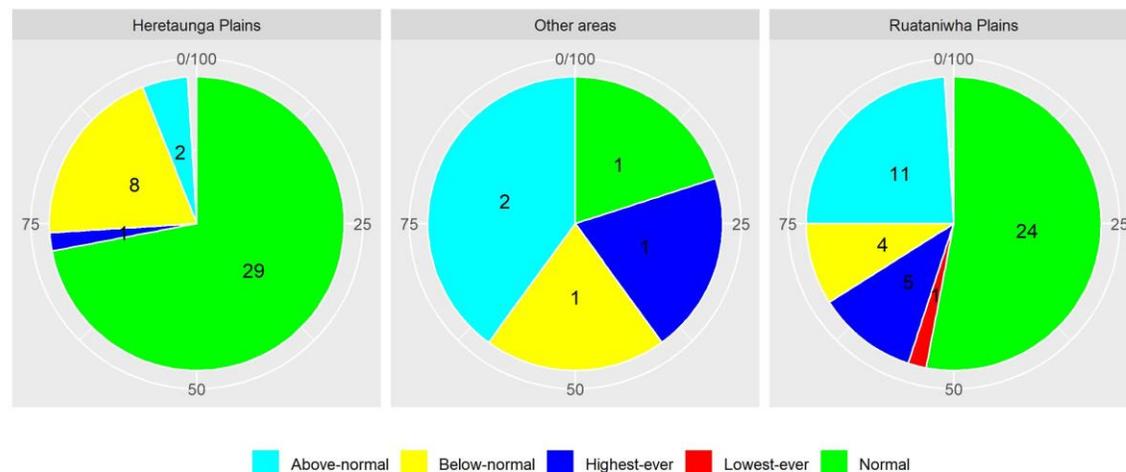
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near or above normal.

Current state of Groundwater levels:

This report compares groundwater levels in June 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.



AIR QUALITY

Bummer - an exceedance in Hastings.

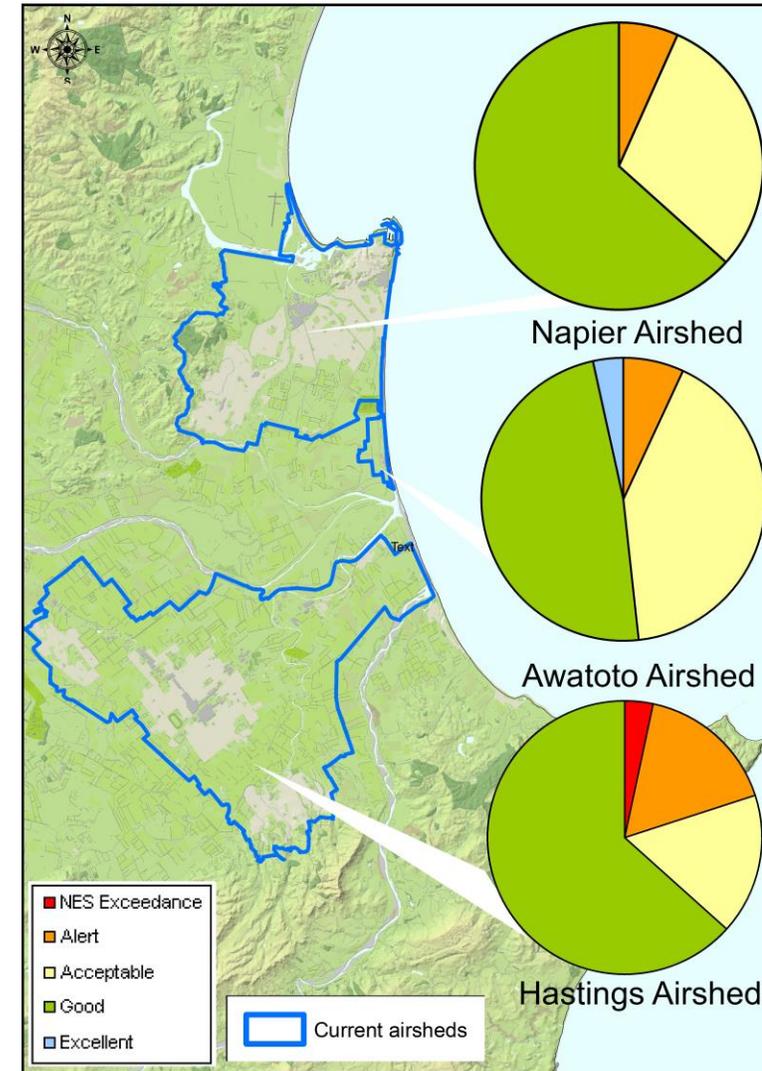
PM₁₀ exceedances:

The National Environmental Standard (NES) for particulate matter (PM 10) of 50 micrograms per cubic metre (24 hour average) was exceeded once in the Hastings airshed and not exceeded in the Napier and Awatoto airsheds during June 2022.

The monitoring sites are located at:

- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.
- Waitangi Road in the Awatoto airshed.

Further information is available at www.hbrc.govt.nz



LONGER FORECAST

The influence of the La Niña remains in the picture and could be for the rest of the year. Confidence is increasing that a negative Indian Ocean Dipole will establish itself for the remainder of winter and spring. Together they improve our chances of getting normal or above normal rainfall in the months ahead.

Sea level pressures over the next three months are expected to be lower than normal to the west of the country, particularly over the north Tasman Sea, and higher to the east of New Zealand. The setup should bring us a good dose of winds from a northerly direction. That will help keep our temperatures warmer than usual and likely deliver bursts of rain to keep our rainfall, flows, soil moisture and groundwater stats near or above normal.

Kathleen Kozyniak
Team Leader Marine Air and Land Science