



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

April 2022



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

April 2022

Rainfall took a breather over April after pummeling the region the previous two months. We braced for more when ex-tropical cyclone Fili approached, but it lightly swatted northern areas and shunned the south. Most of the region ended April with only a third of the month's average rainfall, while Waikaremoana and northern Hawke's Bay edged into the normal range.

River flows across the region held up well, despite the dearth of rain in many areas, staying near or above average for the month. So too soil moisture, which stood above median levels for the time of year. Our aquifers were still accepting the ample rain from previous months so April's groundwater levels couldn't have looked much happier.

Temperatures climbed almost a degree above average, both day and night. But for the first time this year, the region's lowest temperature for the month was prefixed with a negative. Winter is galloping towards us folks, turning our minds and noses to air quality. Check out our report on that next month.

Kathleen Kozyniak
Principal Scientist - Climate and Air

Summary April 2022

Warm and some relief from the rain.

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

May to July Forecast

Temperature Above or near average

Rain Near or above normal

River flows Near normal

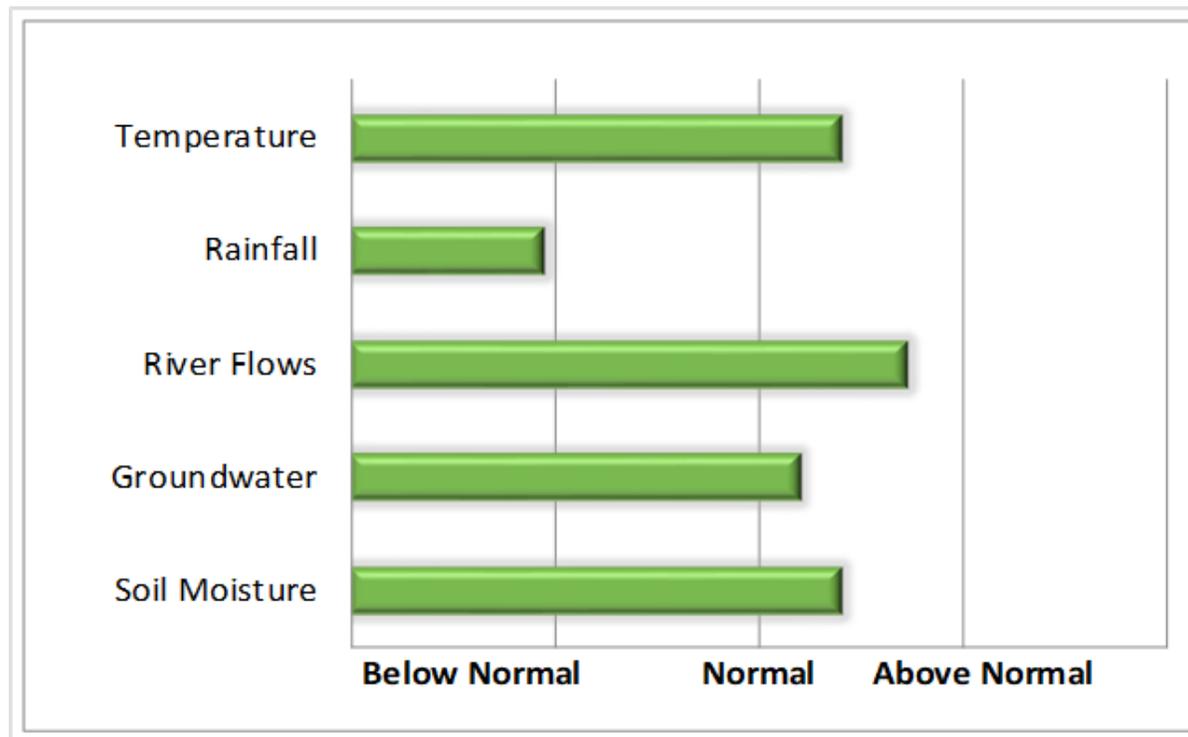
Soil moisture Near normal

source : NIWA

For more information

www.hbrc.govt.nz

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RAINFALL

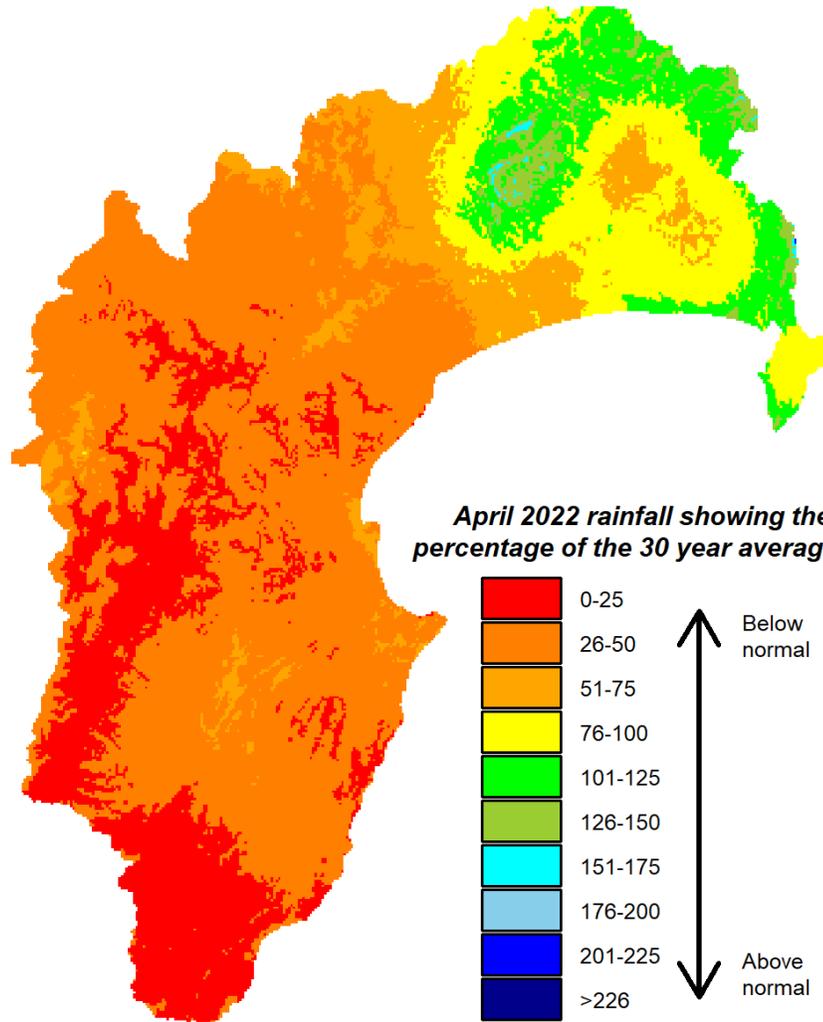
Near normal in the north but dry in the south.
No cloud to ground lightning strikes.

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

Percentage of normal April rainfall
(30 year average)

For areas in the region:

Waikaremoana	97%
Northern HB	84%
Tangoio	35%
Kaweka	29%
Ruahine	30%
Heretaunga Plains	39%
Ruataniwha Plains	35%
Southern HB	24%
Hawke's Bay Region	47%



TEMPERATURES

Above average, both day and night.

Mean Difference from Normal

Maximum Temperature: 0.9°C

Minimum Temperature: 0.7°C

Mean Daily Maximum: 19 °C

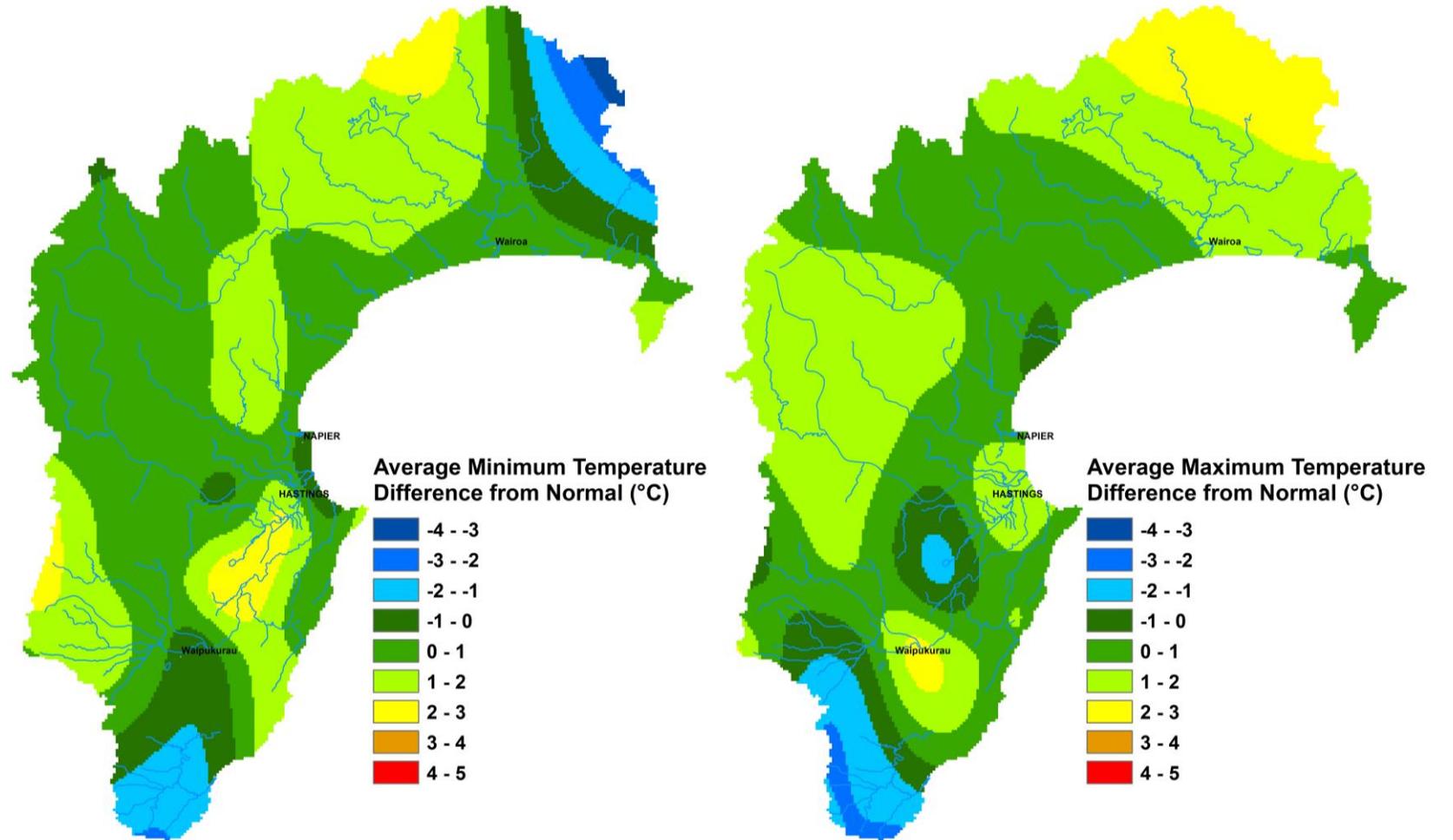
Mean Daily Minimum: 9°C

Highest Daily: 28.4 °C

Location: Hastings AWS (Metservice)

Lowest Daily: -2.1 °C

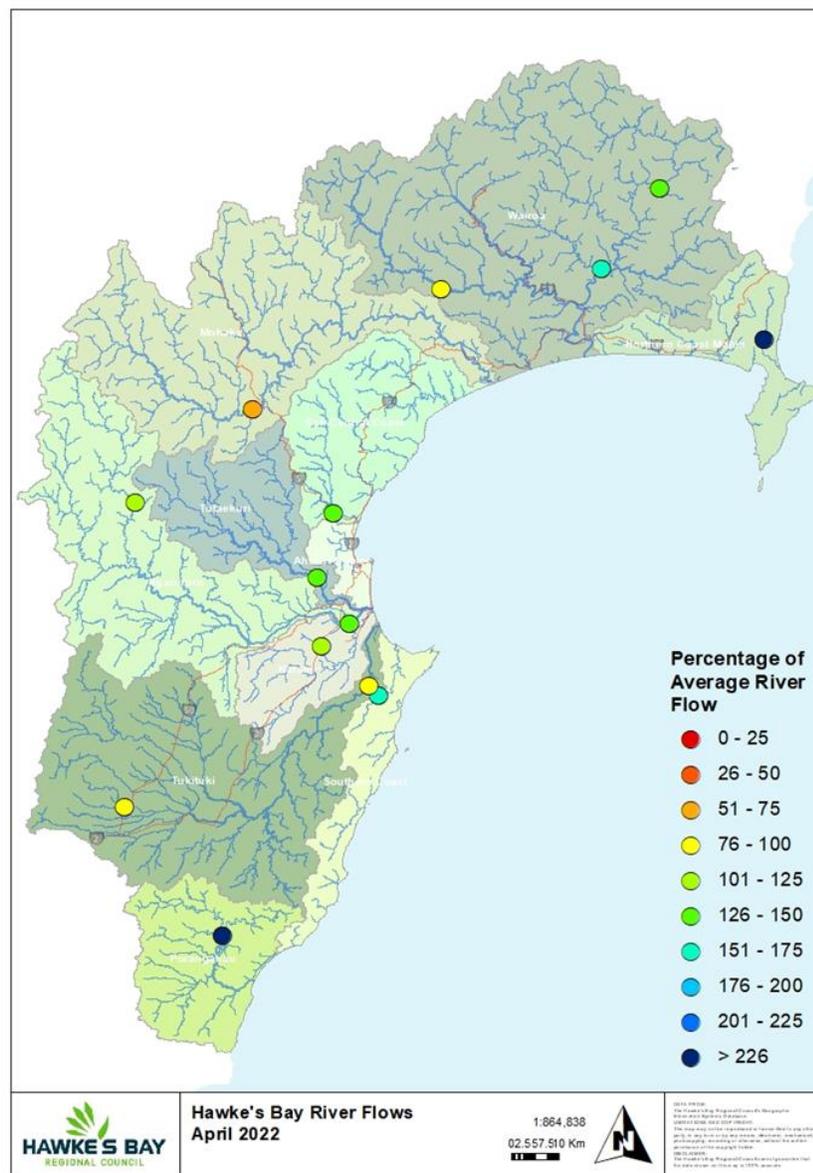
Location: Taharua Climate



RIVER FLOW

Percentage of average April flows
for areas in the region:

Northern Coast – Mahia	242%
Northern HB – Hangaroa River	137%
Northern HB – Wairoa River	175%
Northern HB – Waiau River	93%
Mohaka	73%
Esk-Central Coast	127%
Tūtaekuri	127%
Karamu	111%
Ngaruroro – Kuripapango	105%
Ngaruroro – Chesterhope	136%
Southern Coast	162%
Tukituki – Tukipo River	80%
Tukituki – Tukituki River	96%
Porangahau	244%
Hawke's Bay Region	136%



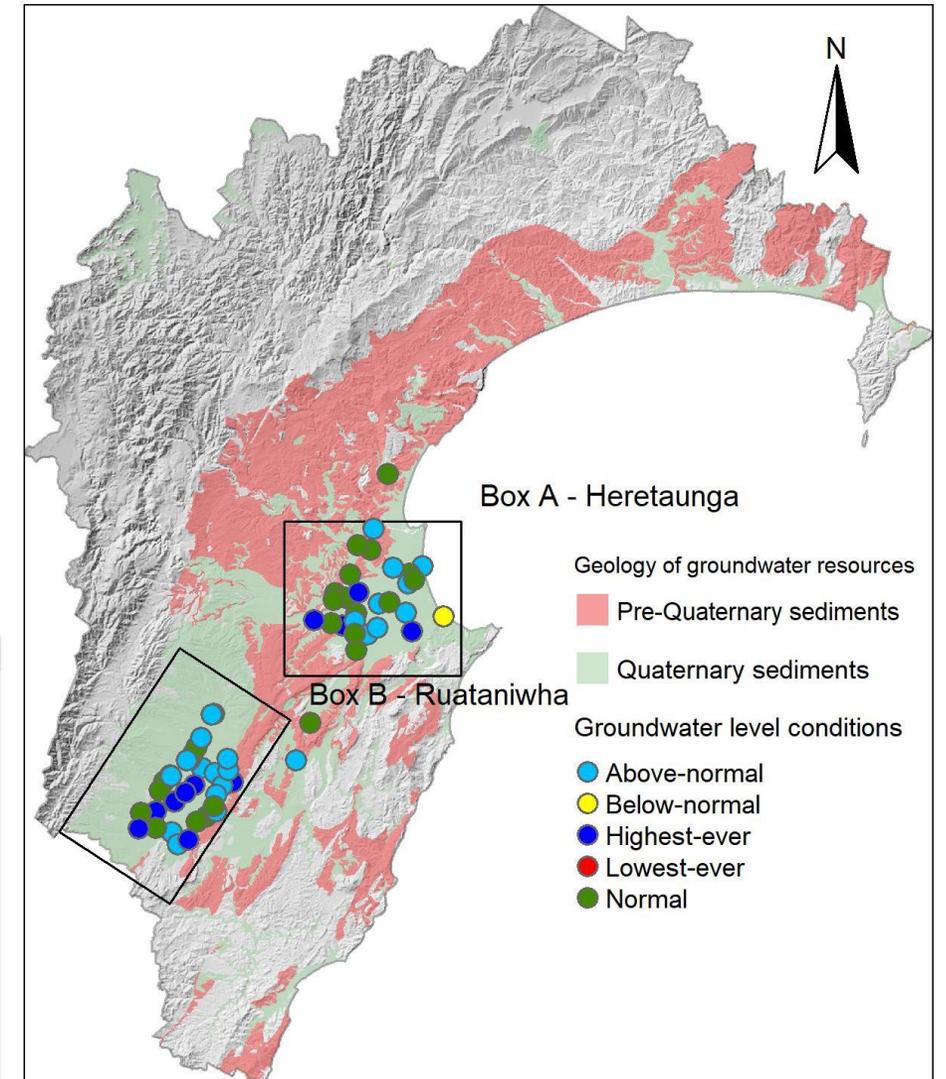
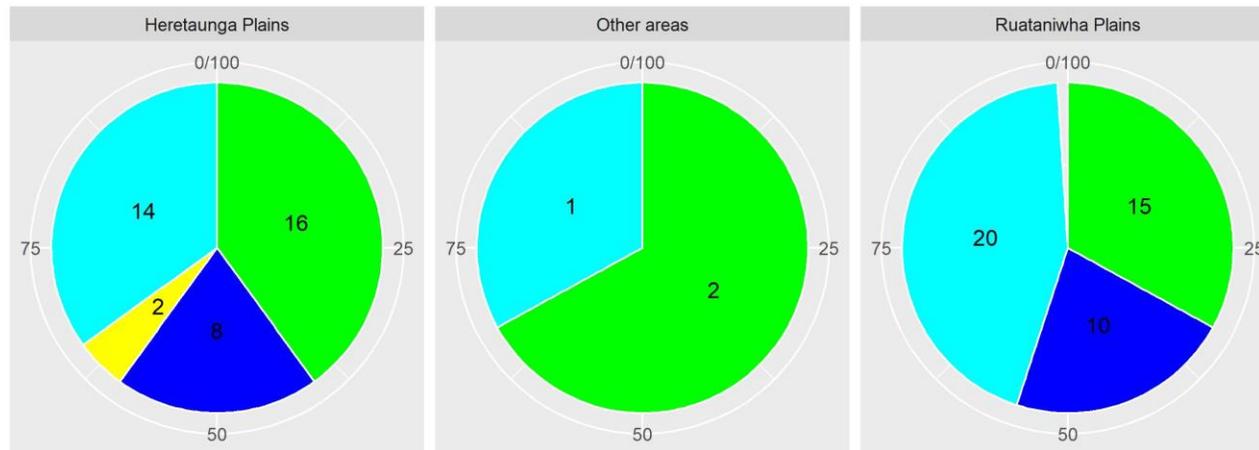
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Well above normal.

Current state of Groundwater levels:

This report compares groundwater levels in April 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

It's proving hard to shake the La Niña and guess what, odds for another summer La Niña are currently edging out neutral conditions, while an El Niño lies a distant last. As for the next three months, little change is expected in the general weather pattern. Lower than normal sea level pressure is likely northwest of the country and higher than normal to the east, giving life to north easterly winds.

An interesting difference though is the spread in the models' forecasted rainfall. No longer is there a strong bias towards above normal rainfall but instead predictions are a jumble of above, near and below normal. This failure to agree increases uncertainty in any prediction. Sea surface temperatures have been close to normal around Hawke's Bay more recently and models are predicting warming at levels higher in the atmosphere, which together have potential to take some of the fuel out of the rainfall engine. Seas are still warmer than usual around most of the country however, helping temperatures to stay near or above average.

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