



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

April 2023



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

April 2023

Benign, kind autumn weather is what the region needed... so far so good. April rainfall was near normal, the western ranges being the main recipients. The Heretaunga Plains though fell well short of its April average and only managed about half of the month's normal total.

The rain in the ranges kept our rivers flowing at above normal levels and our high soil moisture levels hardly budged despite the drier weather in the east. Groundwater levels were tame compared to last month's cluster at all-time highs but sat comfortably near or above normal for April.

Sea surface temperatures were again close to average for the month but the air temperatures went bonkers. Nearly 1°C above normal during the day and shooting up to 2°C above normal overnight. So the fashion crime called my slippers is yet to happen and hopefully there's no rush to stoke home fires as we launch into our air quality reporting next month.

Dr Kathleen Kozyniak
Team Leader Marine Air and Land Science

SUMMARY April 2023

May to July Forecast

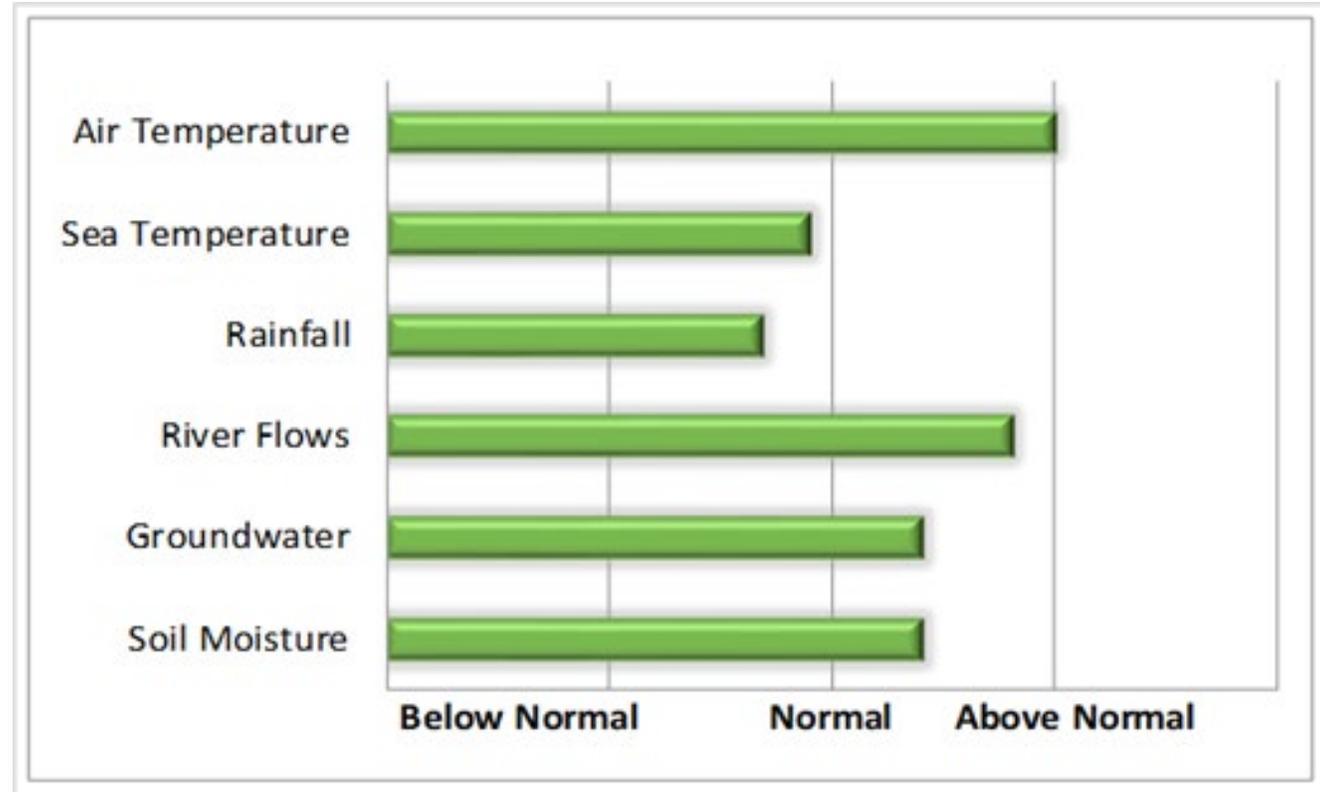
Temperature	Near or above average
Rain	Near normal
River flows	Near normal
Soil moisture	Near normal

source : NIWA

For more information

www.hbrc.govt.nz

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RAINFALL

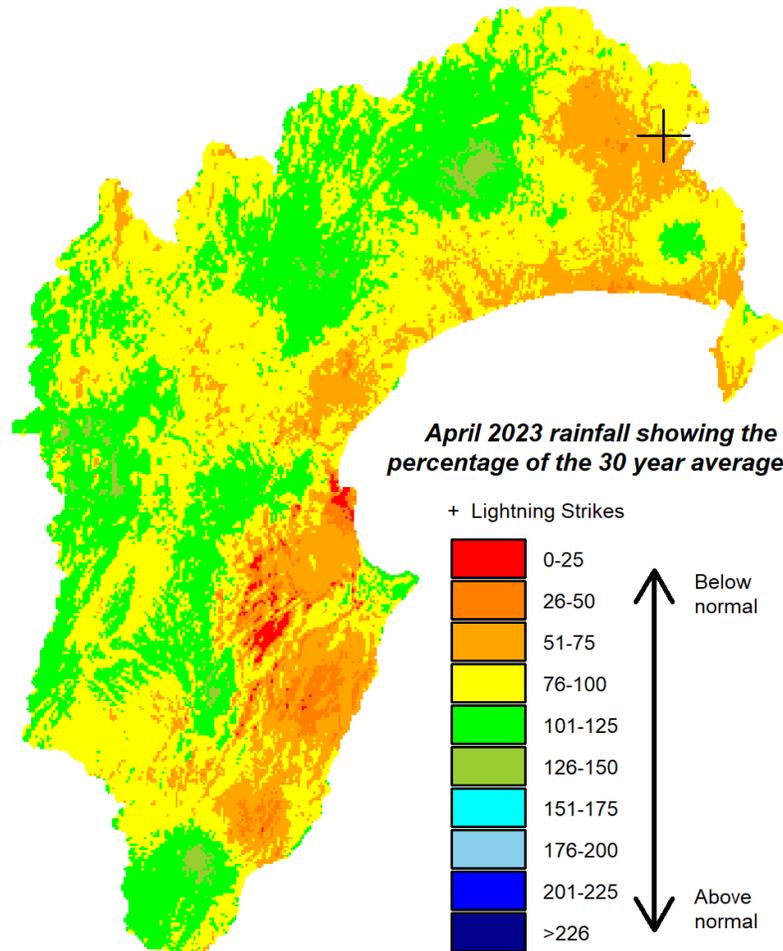
Near normal for most, dry on the Heretaunga Plains. 2 cloud to ground lightning strikes.

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	103%
Northern HB	77%
Tangoio	88%
Kaweka	92%
Ruahine	100%
Heretaunga Plains	54%
Ruataniwha Plains	84%
Southern HB	77%
Hawke's Bay Region	84%



AIR TEMPERATURES

Temperatures – warm, especially overnight.

Mean Difference from Normal

Maximum Temperature: 0.9°C

Minimum Temperature: 2.3°C

Mean Daily Maximum: 19 °C

Mean Daily Minimum: 11°C

Highest Daily: 27.5 °C

Location: Wairoa North Clyde EWS (NIWA)

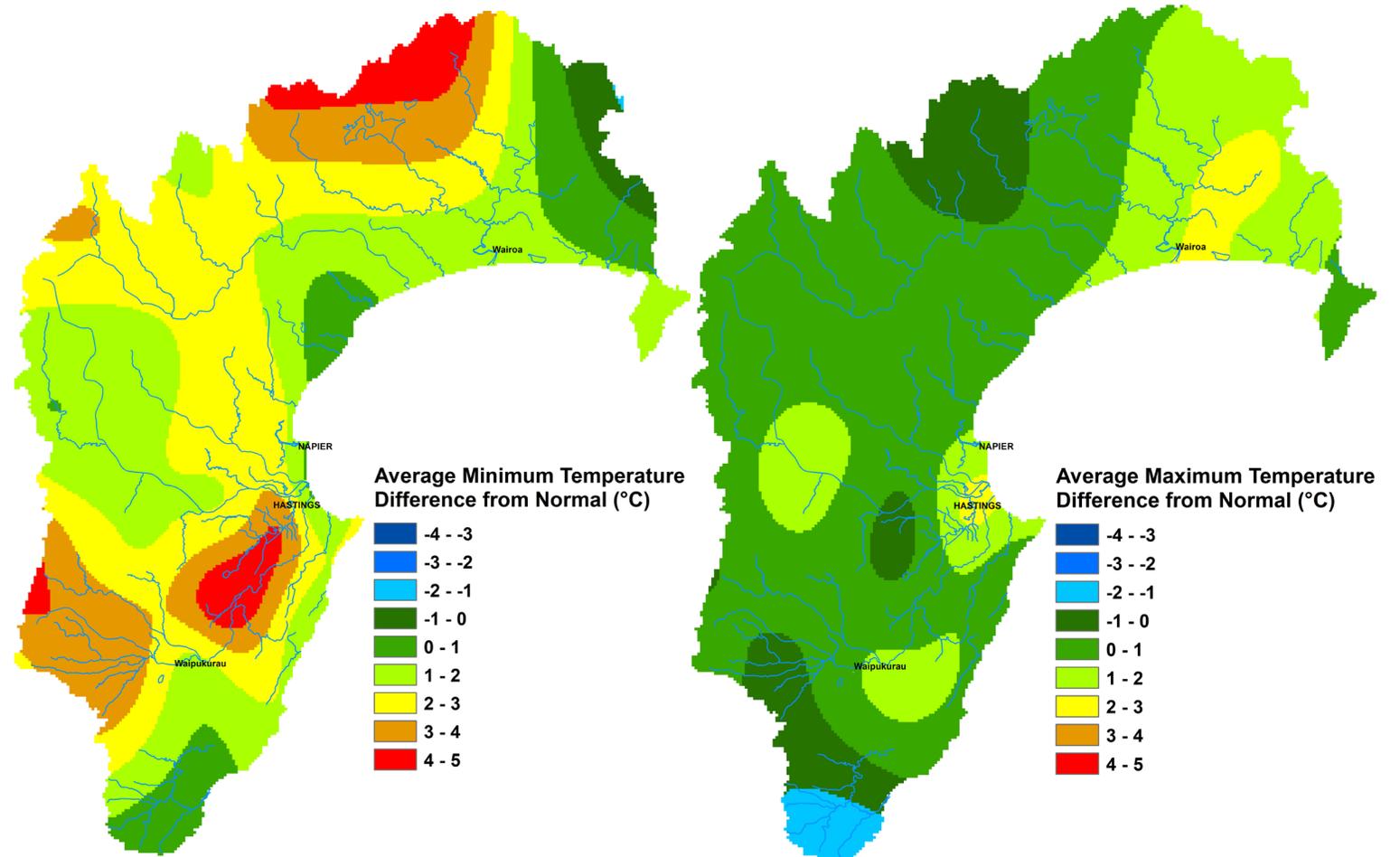
Lowest Daily: -2.7 °C

Location: Taharua Climate

SEA SURFACE TEMPERATURES

The average sea surface temperature (SST) for Hawke's Bay in April 2023 was 17.9 °C. This was 0.06 °C lower than the long term average for this month*. This data was collected from the HBRC coastal water quality monitoring buoy HAWQI which has been located 4km off the coast of Whirinaki since December 2012. HAWQI collects data on water temperature, salinity and clarity at a range of depths as well as weather information. Check out real time data from HAWQI [here](#).

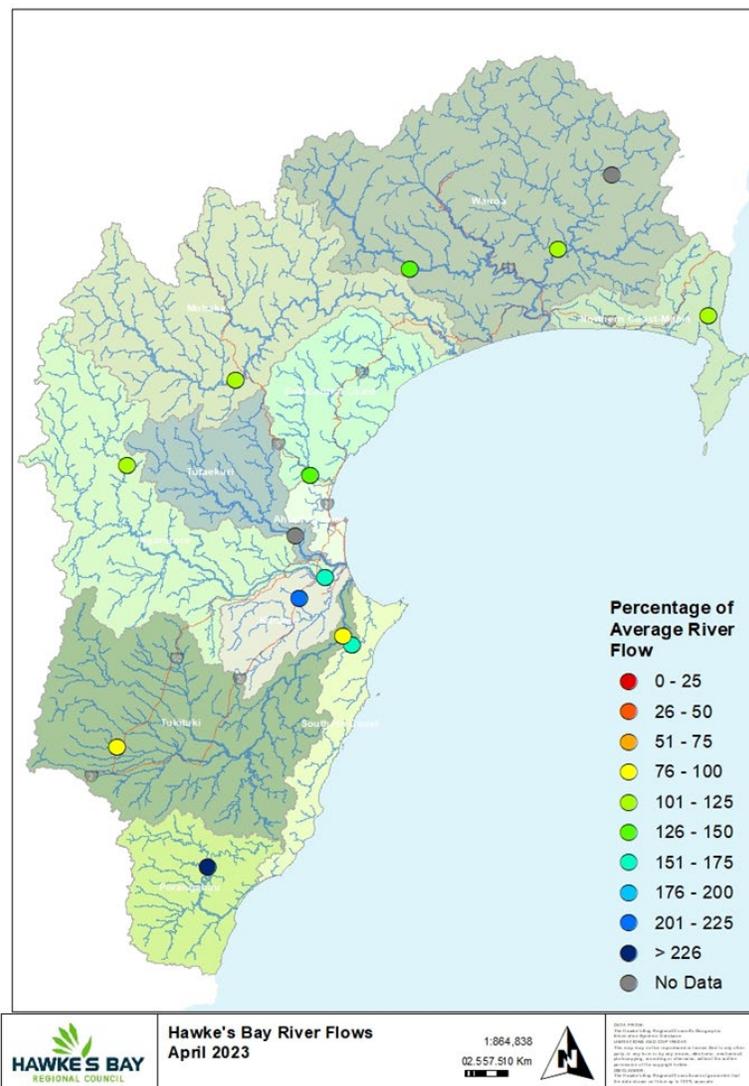
**Note that long term data has experienced some patchiness due to the challenges of electronic devices interacting with salt water and servicing requirements so the long term average in this instance only includes 7 prior April's.*



RIVER FLOW

Percentage of average April flows
for areas in the region:

Northern Coast – Mahia	119%
Northern HB – Hangaroa River	NA
Northern HB – Wairoa River	119%
Northern HB – Waiau River	132%
Mohaka	107%
Esk-Central Coast	148%
Tūtaekuri	NA
Karamu	204%
Ngaruroro – Kuripapango	111%
Ngaruroro – Chesterhope	169%
Southern Coast	173%
Tukituki – Tukipo River	100%
Tukituki – Tukituki River	95%
Porangahau	257%
Hawke's Bay Region	145%



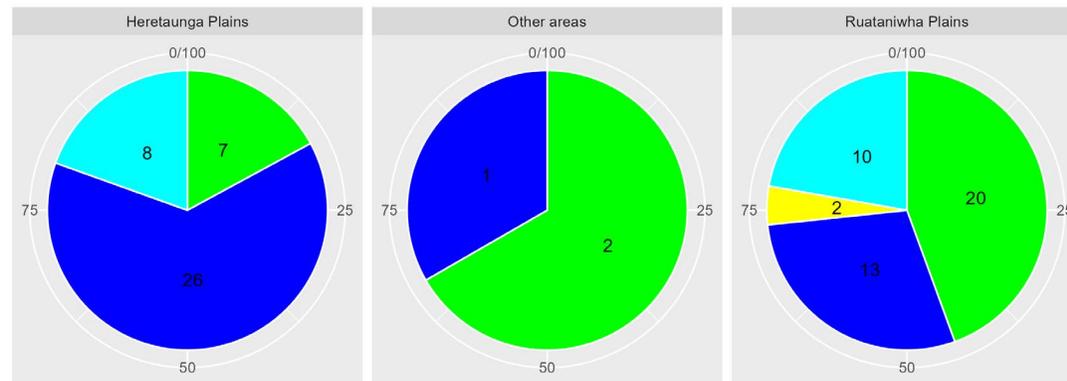
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Well above normal

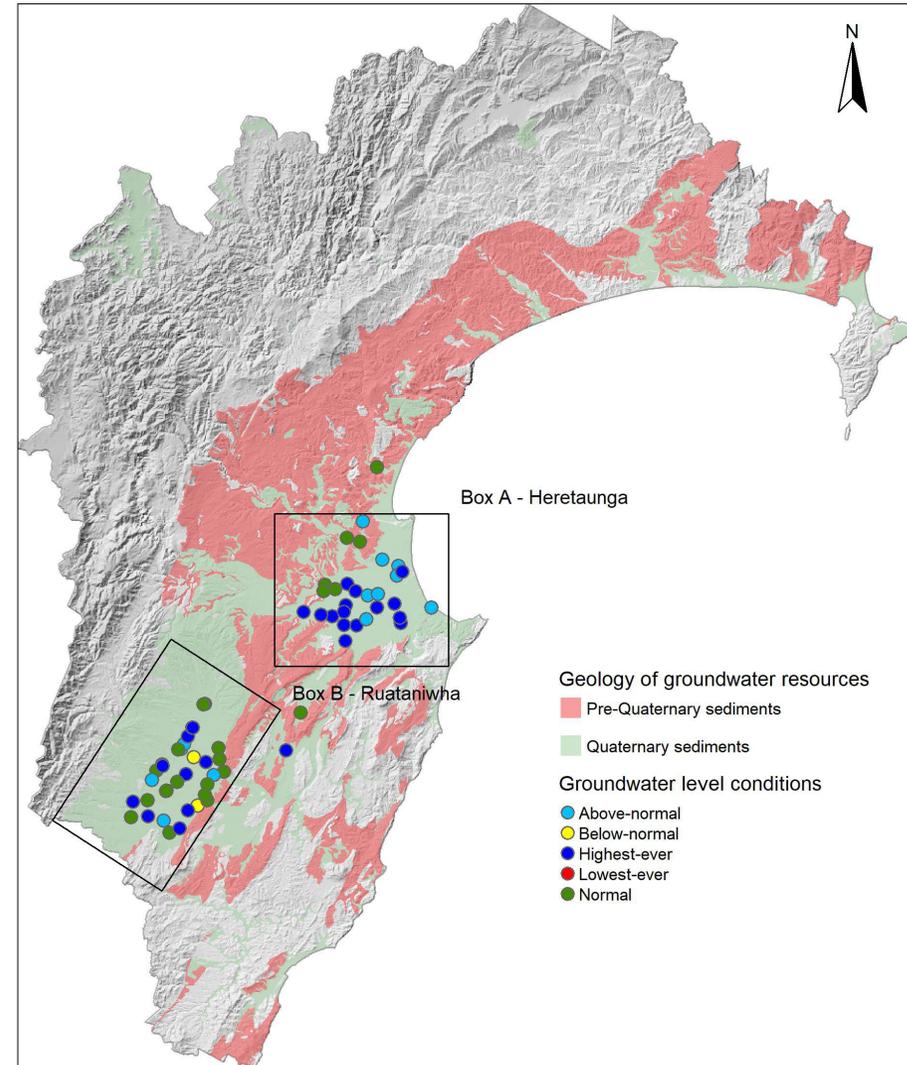
Current state of Groundwater levels:

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.



■ Above-normal
 ■ Below-normal
 ■ Highest-ever
 ■ Lowest-ever
 ■ Normal



LONGER FORECAST

We're in neutral but an El Niño could surface by the end of winter. A positive Indian Ocean Dipole is also expected to rear itself in the coming months. It's a combo hinting that drier weather might lie ahead.

In this time of transition, the forecast models are more mixed in their predictions, which lessens confidence in the outcome. Most suggest sea level pressures will be below normal northeast of the country over the next few months and higher pressure either west or south of the country.

The variation in the latter leads to uncertainty over the direction of wind flow, which is likely to be mixed. Near or above normal temperatures and near normal rainfall are predicted, though that rain seems weighted to the beginning rather than end of the period with some models suggesting drier weather as time goes on.

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Team Leader Marine Air and Land Science