



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

November 2021



TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

November 2021

November was big. Big rainfall, big river flows, and bigger temperatures. Rainfall was well above average, especially in northern parts of the region. But all areas topped 100% of their November average thanks to a good push on the last day. River flows were decidedly up, with a northern coastal stream reaching a heady 600% of its average November flows.

The majority of groundwater levels sat in the normal and above normal category – hopefully it's a corner well turned. Soil moisture levels stayed above median levels for the time of year though dropped somewhat alarmingly in the south of the region during an extended dry spell in the month.

Temperatures rampaged and the overnight average was typical of January rather than November. The wet, hot weather resulted in a slightly inglorious start to our recreational water quality reporting and also meant, being all of five foot and not much, weeds in my backyard suddenly threatened my eye line and bananas had to be harvested due to literally jumping out of their skins.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY November 2021

Hot and wet.

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

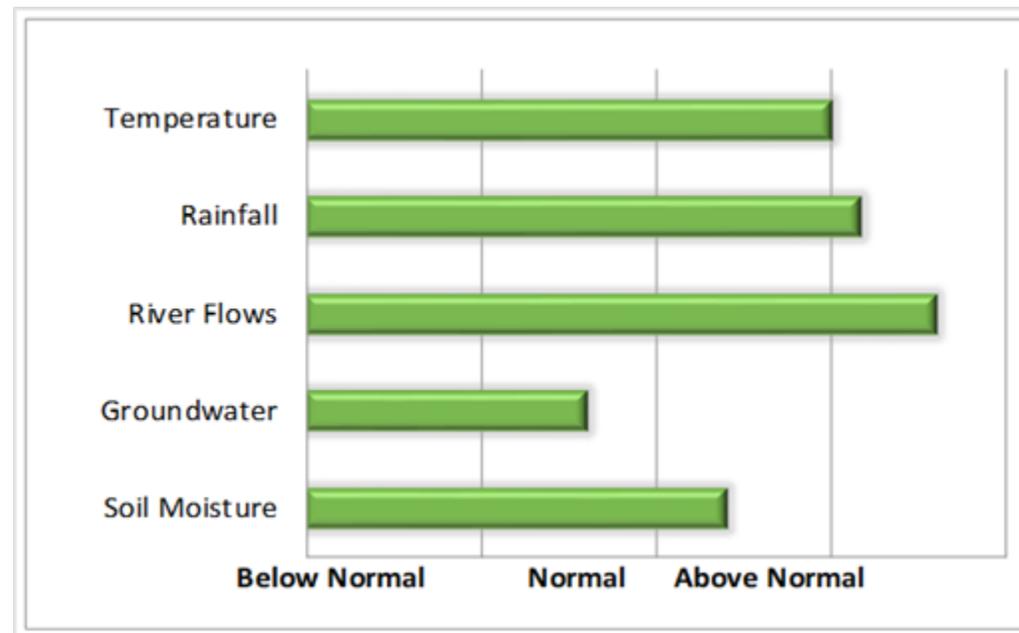
Temperature	Above average
Rain	Near normal
River flows	Near or below normal
Soil moisture	Below normal

source : NIWA

For more information

www.hbrc.govt.nz

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RAINFALL

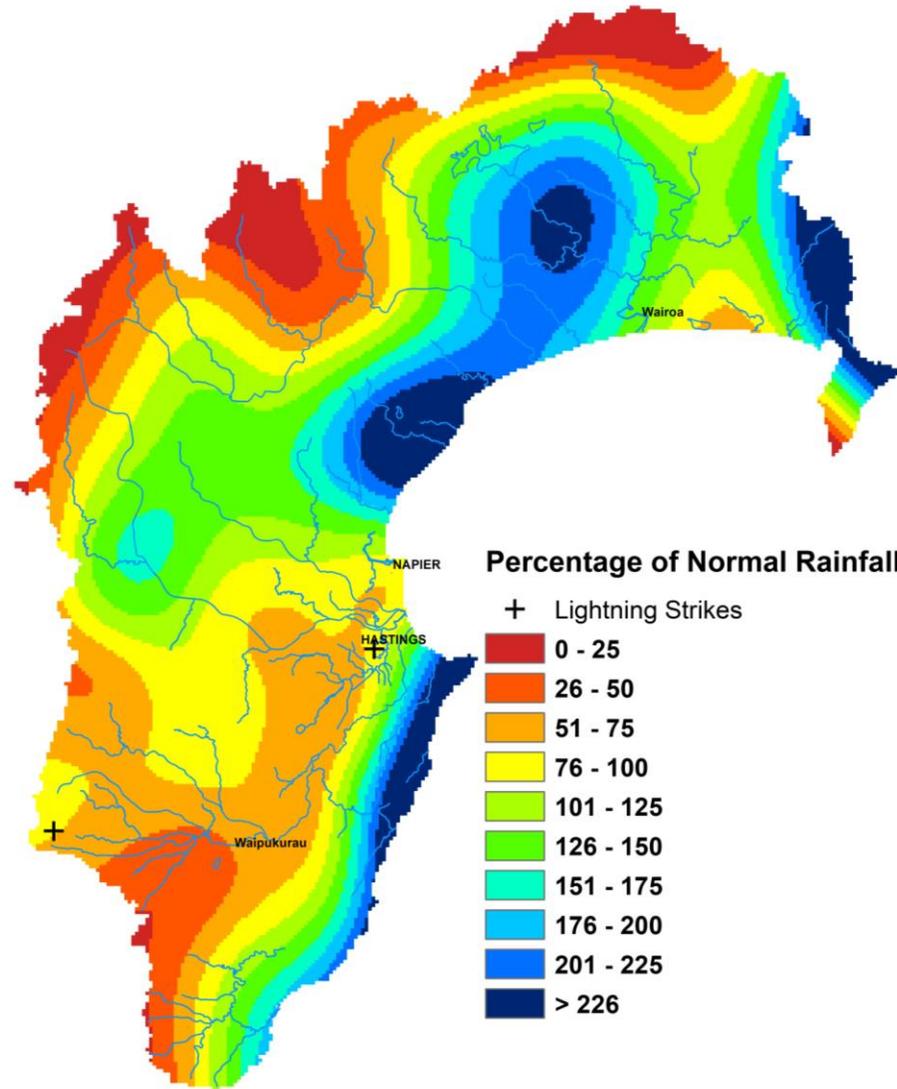
Above normal, especially in areas north of Napier. Two cloud to ground lightning strikes.

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

Percentage of normal November rainfall
(30 year average)

For areas in the region:

Waikaremoana	185%
Northern HB	215%
Tangoio	209%
Kaweka	153%
Ruahine	126%
Heretaunga Plains	102%
Ruataniwha Plains	110%
Southern HB	162%
Hawke's Bay Region	158%



TEMPERATURES

Stonking, especially nights.

Mean Difference from Normal

Maximum Temperature: 1.5°C

Minimum Temperature: 2.8 °C

Mean Daily Maximum: 20 °C

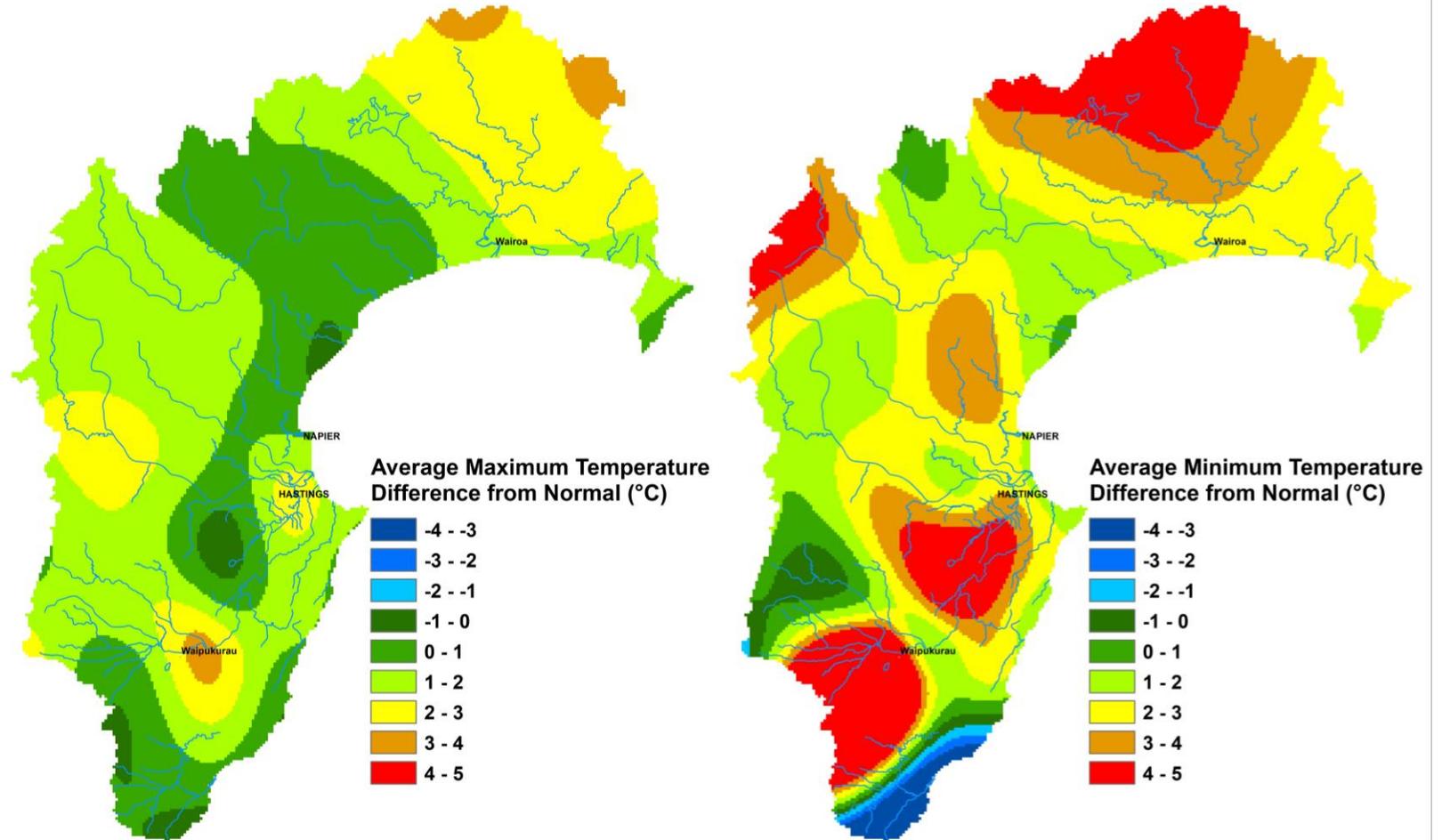
Mean Daily Minimum: 12°C

Highest Daily: 31.7 °C

Location: Hastings AWS (Metservice)

Lowest Daily: 2.7 °C

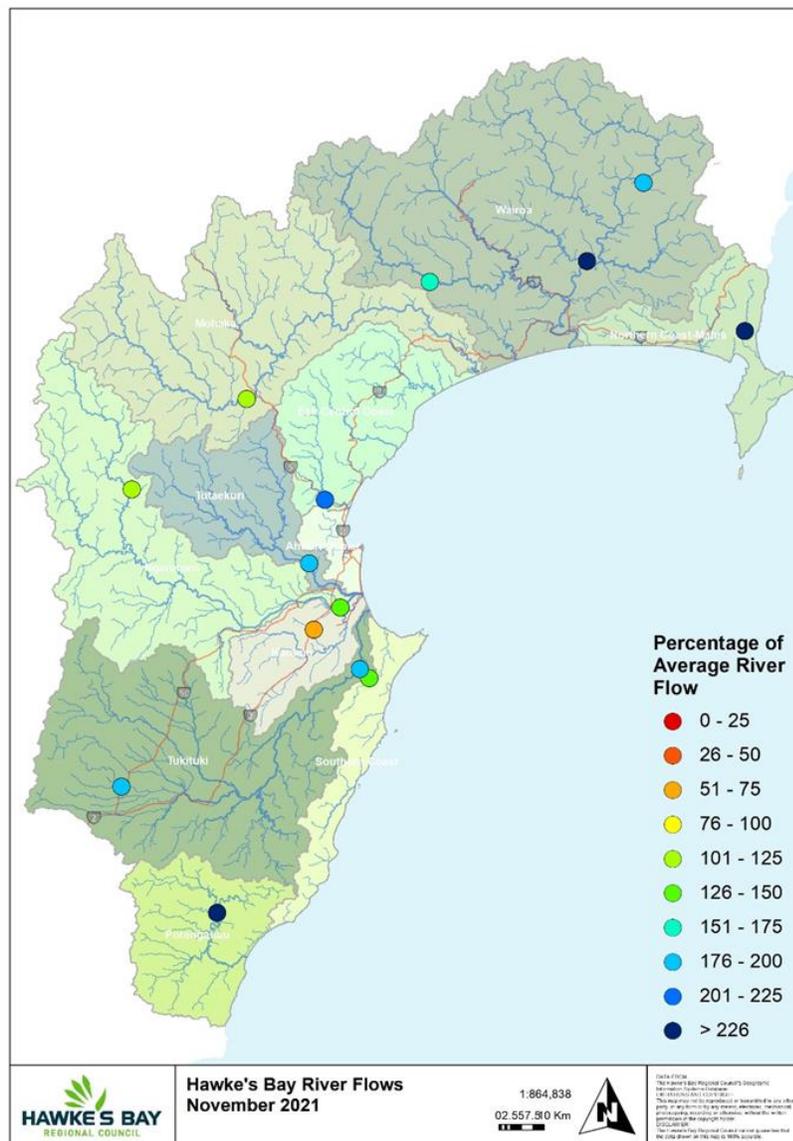
Location: Waipawa EWS (NIWA)



RIVER FLOW

Percentage of average November flows
for areas in the region:

Northern Coast – Mahia	619%
Northern HB – Hangaroa River	192%
Northern HB – Wairoa River	228%
Northern HB – Waiau River	168%
Mohaka	101%
Esk-Central Coast	214%
Tūtaekuri	181%
Karamu	62%
Ngaruroro – Kuripapango	124%
Ngaruroro – Chesterhope	128%
Southern Coast	138%
Tukituki – Tukipo River	179%
Tukituki – Tukituki River	194%
Porangahau	497%
Hawke's Bay Region	216%



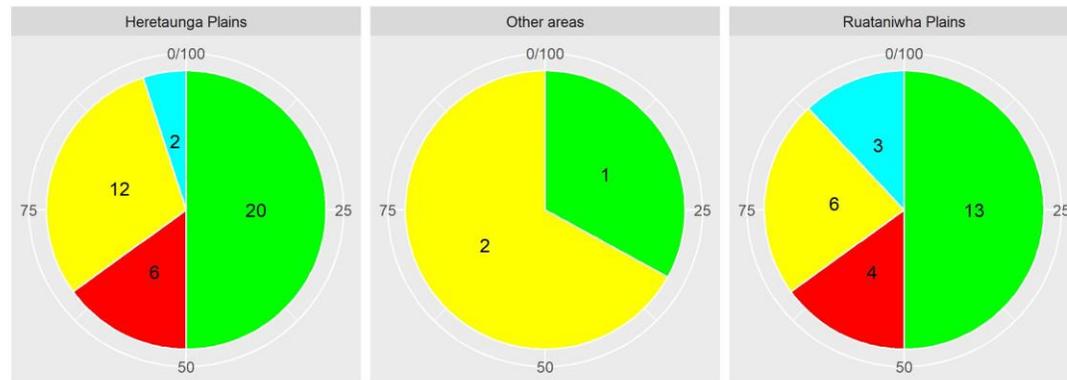
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near or above normal.

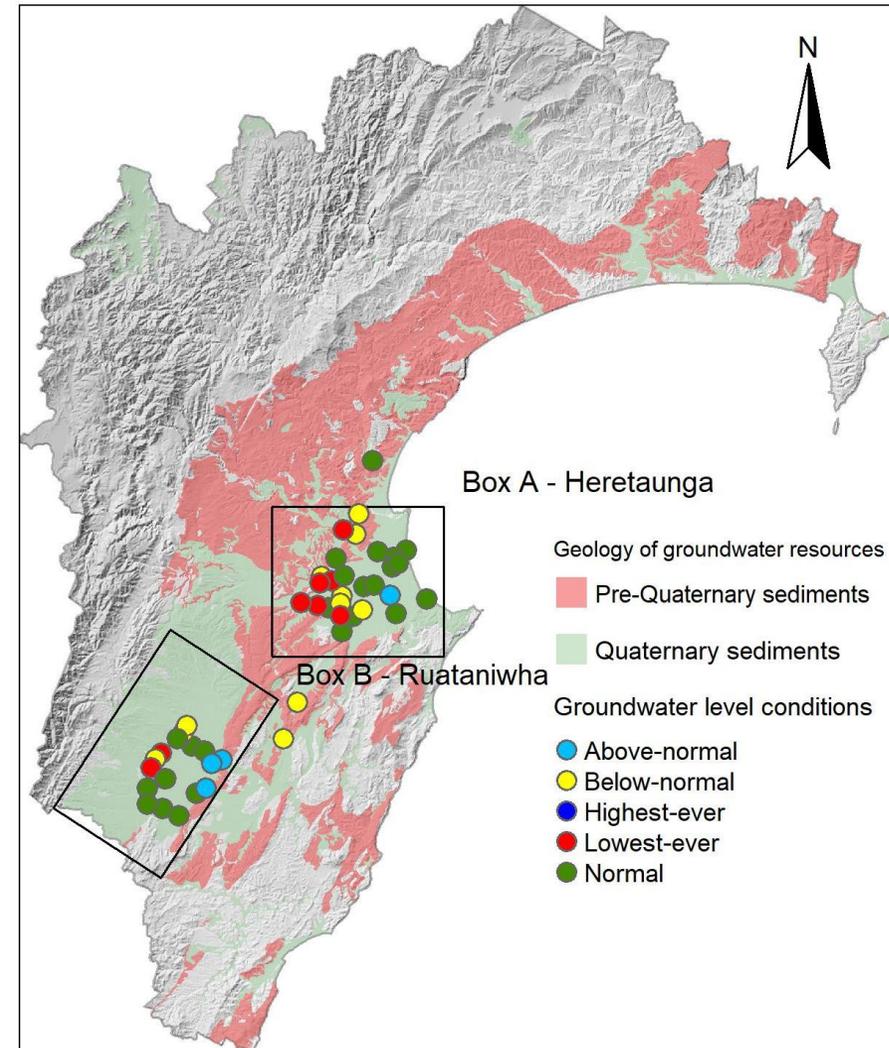
Current state of Groundwater levels:

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.



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



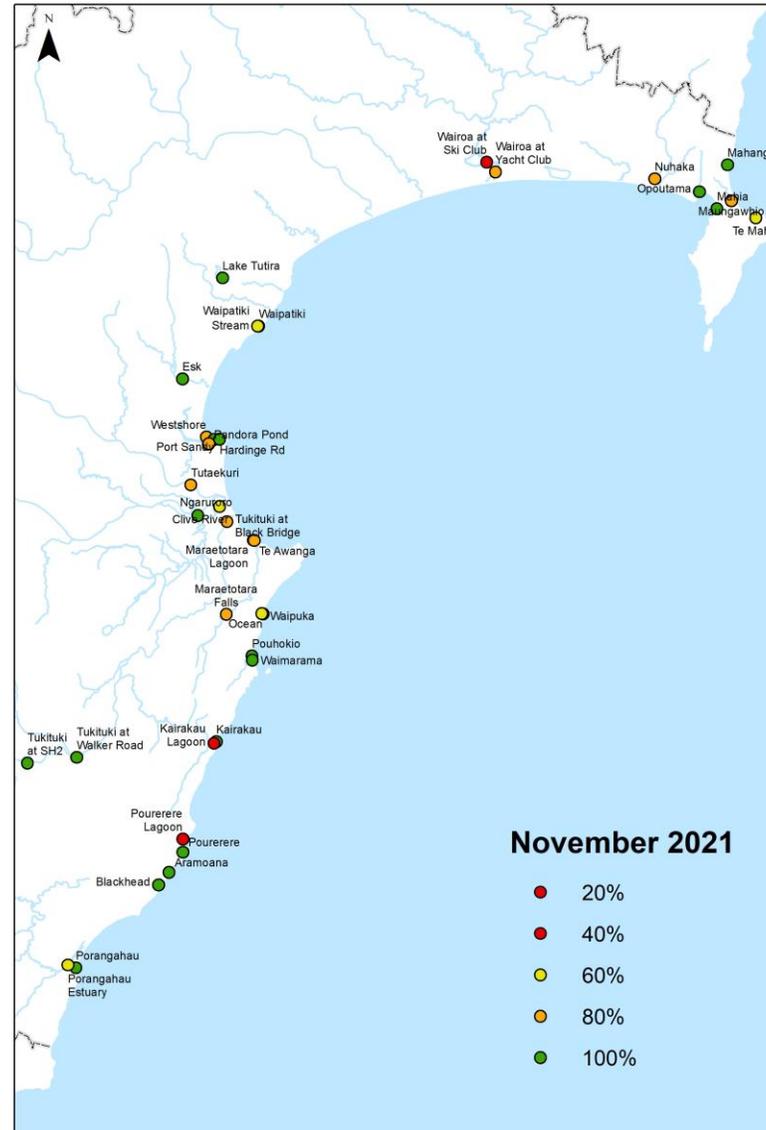
RECREATIONAL WATER QUALITY

The Recreational Water Quality monitoring program began on Monday 1st November for the 2021-22 season.

Heavy rainfall in the second week of the month resulted in a large number of rainfall related exceedances across the region. Ongoing pockets of spring rain have meant a lingering trend of exceedances over the month.

We have begun weekly monitoring at Pourerere Lagoon this year, which is a popular swim spot in southern Hawkes Bay.

Clive river has previously been monitored fortnightly, however will resume weekly testing this season.



LONGER FORECAST

La Niña is with us for the summer so if all goes to plan Hawke's Bay would get more of what we've just had. Sea level pressures are expected to be higher than normal to the south of us during summer and lower to the north, so we can expect more easterlies than average as a result.

The seasonal forecast models invariably depict normal or above normal rainfall for the region, though the north may see more wet stuff than the south. Sea temperatures around the country are unusually warm and that looks set to continue, with air temperatures riding alongside. Potentially warm and humid then, i.e. a sweat-fest.

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