



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

September 2021



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

September 2021

Launching our drought app has already proved successful. It's rained ever since. I'm stoked to say the region's September rainfall was above normal. The Heretaunga Plains, Tangoio and the main ranges were closer to normal, but we'll take that and enjoy that the rest of the region was reasonably well soaked.

Soil moisture across Hawke's Bay was mostly above median levels for September, though word on the ground is that it's still dry deeper down. It might explain why river flows improved on the whole but some made hard work of it and gave the impression they sucked rainfall through a straw. September groundwater levels didn't rally much from the previous month - a phrase on rotate it seems.

Temperatures were in the normal range, though tipped into the cooler side of that range. Admittedly cloud made the month a tough gig for my solar ovens so I spent a chunk of the month Hank Marvin starvin'. I'm joking, instead I uncurled my tight-fisted hand and turned on the electric version.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY September 2021

Wet, thankfully, and standard temperatures for spring.

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

October to December Forecast

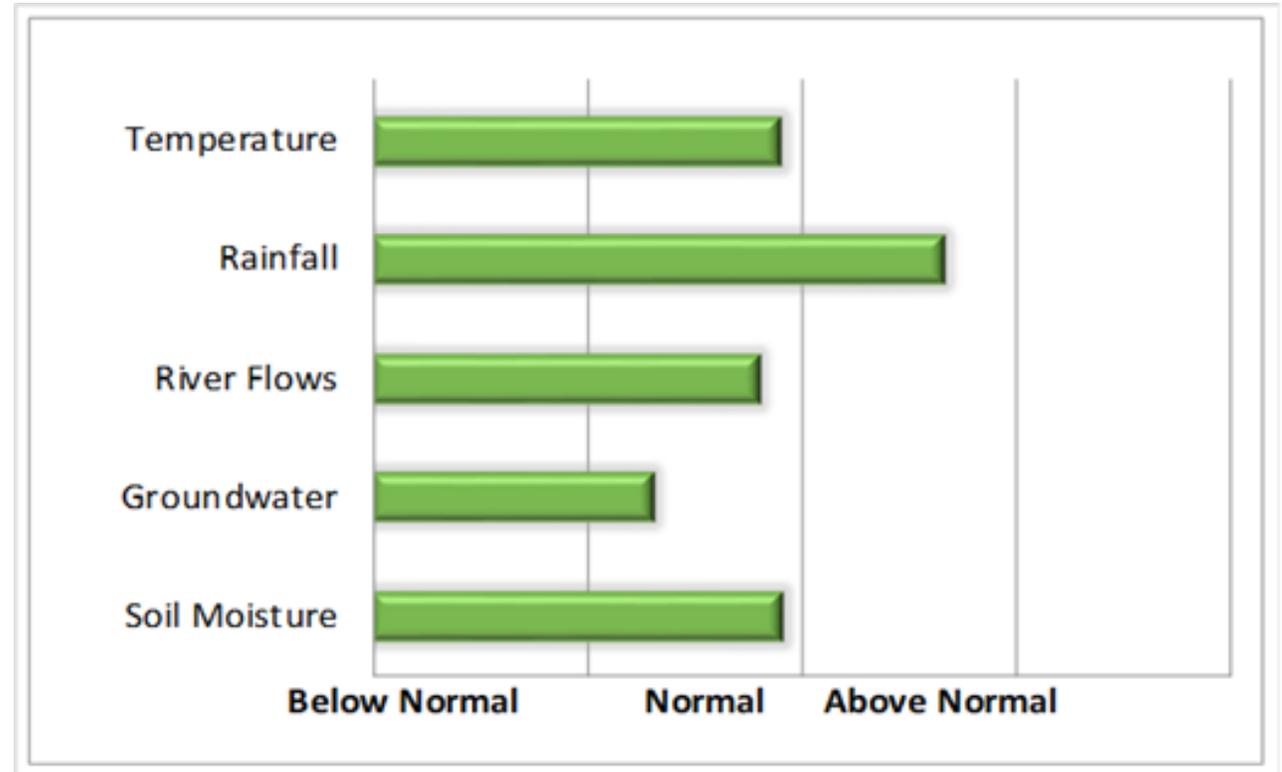
Temperature Above average
Rain Near or below normal
River flows Near or below normal
Soil moisture Near or below normal

source : NIWA

For more information

www.hbrc.govt.nz

P: 06 835 9200



RAINFALL

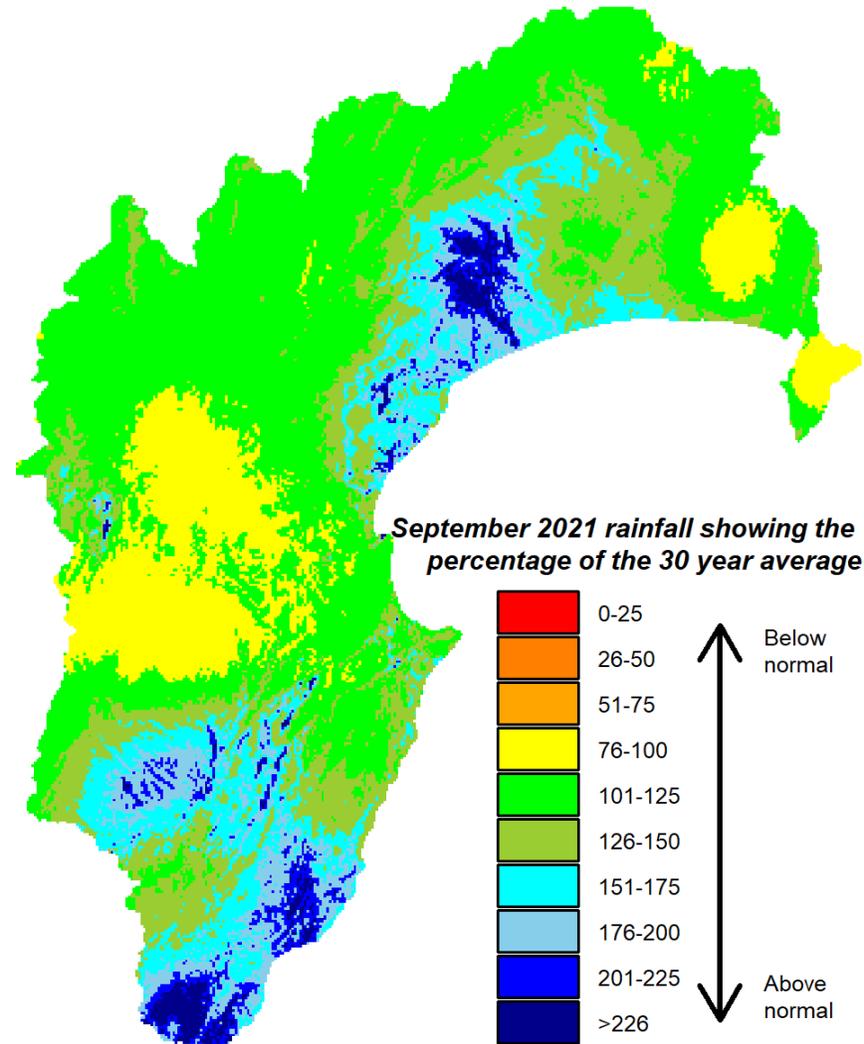
Above normal – it’s a novelty to say it. No cloud to ground lightning strikes.

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

Percentage of normal September rainfall
(30 year average)

For areas in the region:

Waikaremoana	132%
Northern HB	149%
Tangoio	117%
Kaweka	107%
Ruahine	112%
Heretaunga Plains	108%
Ruataniwha Plains	163%
Southern HB	177%
Hawke’s Bay Region	133%



TEMPERATURES

Near average for September.

Mean Difference from Normal

Maximum Temperature: 0 °C

Minimum Temperature: -0.3 °C

Mean Daily Maximum: 15 °C

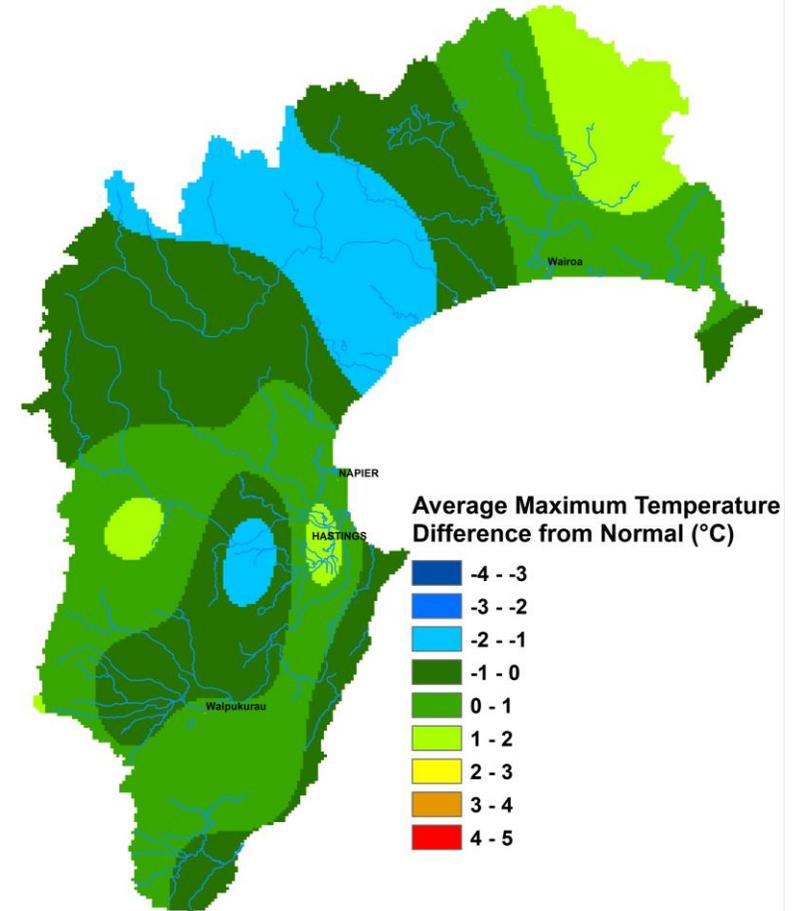
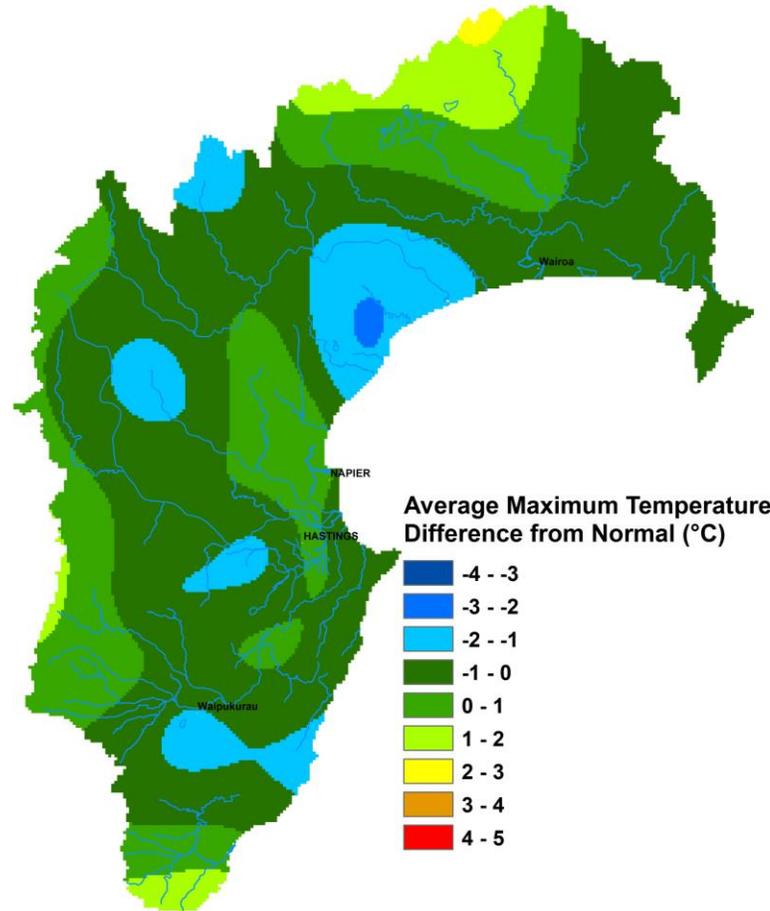
Mean Daily Minimum: 5°C

Highest Daily: 23.4 °C

Location: Ruakituri River at
Tauwharetoi Climate

Lowest Daily: -3.3 °C

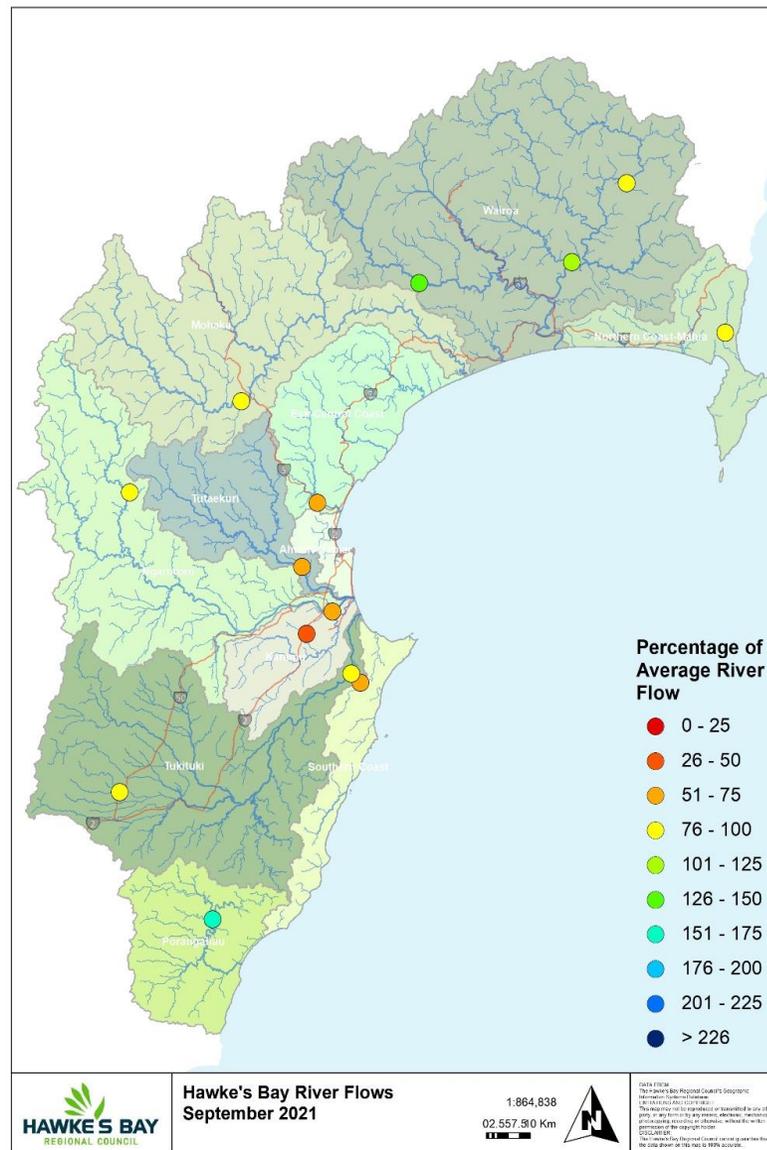
Location: Taharua



RIVER FLOW

Percentage of average September flows
for areas in the region:

Northern Coast – Mahia	98%
Northern HB – Hangaroa River	78%
Northern HB – Wairoa River	109%
Northern HB – Waiau River	131%
Mohaka	95%
Esk-Central Coast	69%
Tūtaekuri	69%
Karamu	46%
Ngaruroro – Kuripapango	94%
Ngaruroro – Chesterhope	61%
Southern Coast	65%
Tukituki – Tukipo River	91%
Tukituki – Tukituki River	82%
Porangahau	172%
Hawke's Bay Region	90%



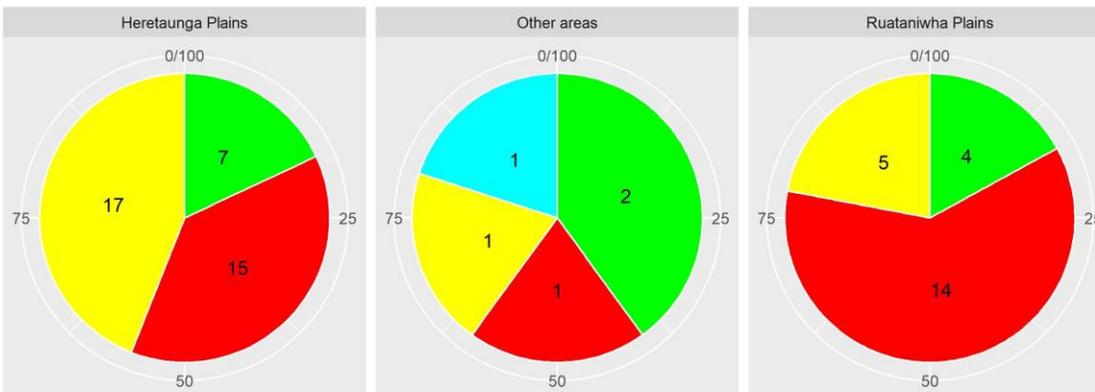
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near or above normal.

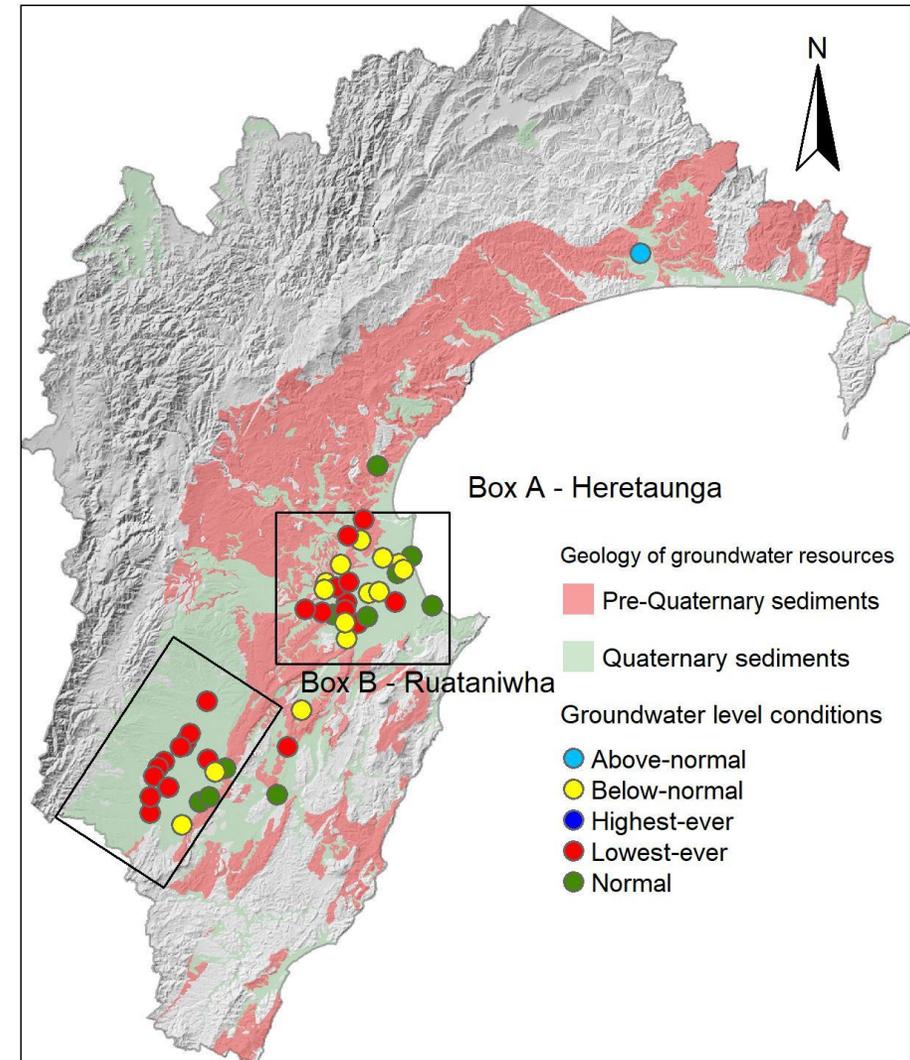
Current state of Groundwater levels:

This report compares groundwater levels in September 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



LONGER FORECAST

It seems the “good guys” in the climate tussle won out during September. The negative Indian Ocean Dipole event, which can help bring spring rain to the region, is waning now but it’s influence may extend further into the season. There remains a good chance that a central Pacific La Niña event could develop in the next few months.

The model forecasts haven’t varied much since last month. They still depict above average mean sea level pressures extending over our region and to the southeast of the country, along with lower than normal pressures over the north Tasman Sea and north of New Zealand. It brings northeasterlies into play, which together with warm sea temperatures has potential to bring warmth and moisture to our shores but the latter countered by the higher than normal pressures.

It sees models predict normal or below normal rainfall for October to December, though at least one model picks above normal rainfall. Hopefully our September weather is a good omen for the months ahead.

Kathleen Kozyniak
Principal Scientist - Climate and Air