



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

October 2020



HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

October 2020

Alongside September's 100% score, the region's rainfall had another solid effort in October – this time reaching 90%. Northern Hawke's Bay, the Kaweka and the Ruataniwha Plains all aced 100% of their October average, while the Ruahine Range was rock bottom by some margin (61%) , despite being wedged between the latter two stars.

October's rain was enough to keep our soil moisture levels trucking along near median levels for the time of year. All good there, but we're not making inroads on river flows or groundwater. Neither seem motivated to pull themselves up to their seasonal norms. In comparison temperatures were full of beans and reached a lively 1 degree above average. An inspiration to anyone hanging out for the year's end just so they can fall over.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY October 2020

Warm! Adequate rain but more welcome.

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.

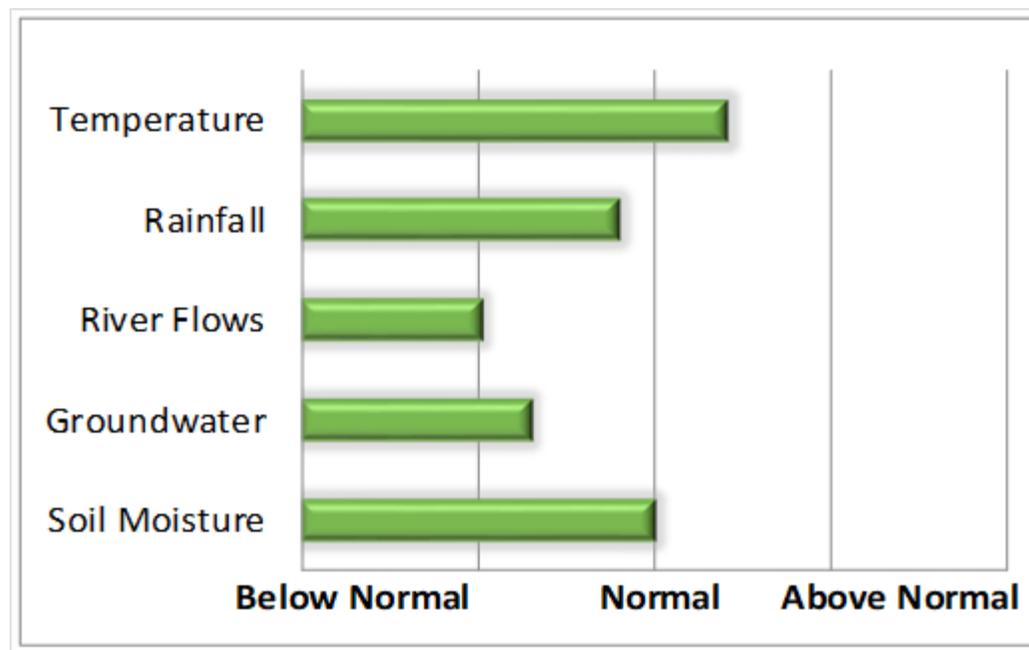
Temperature Above average
Rain Near or below normal
River flows Near or below normal
Soil moisture Near or below normal

source : NIWA

For more information

www.hbrc.govt.nz

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RAINFALL

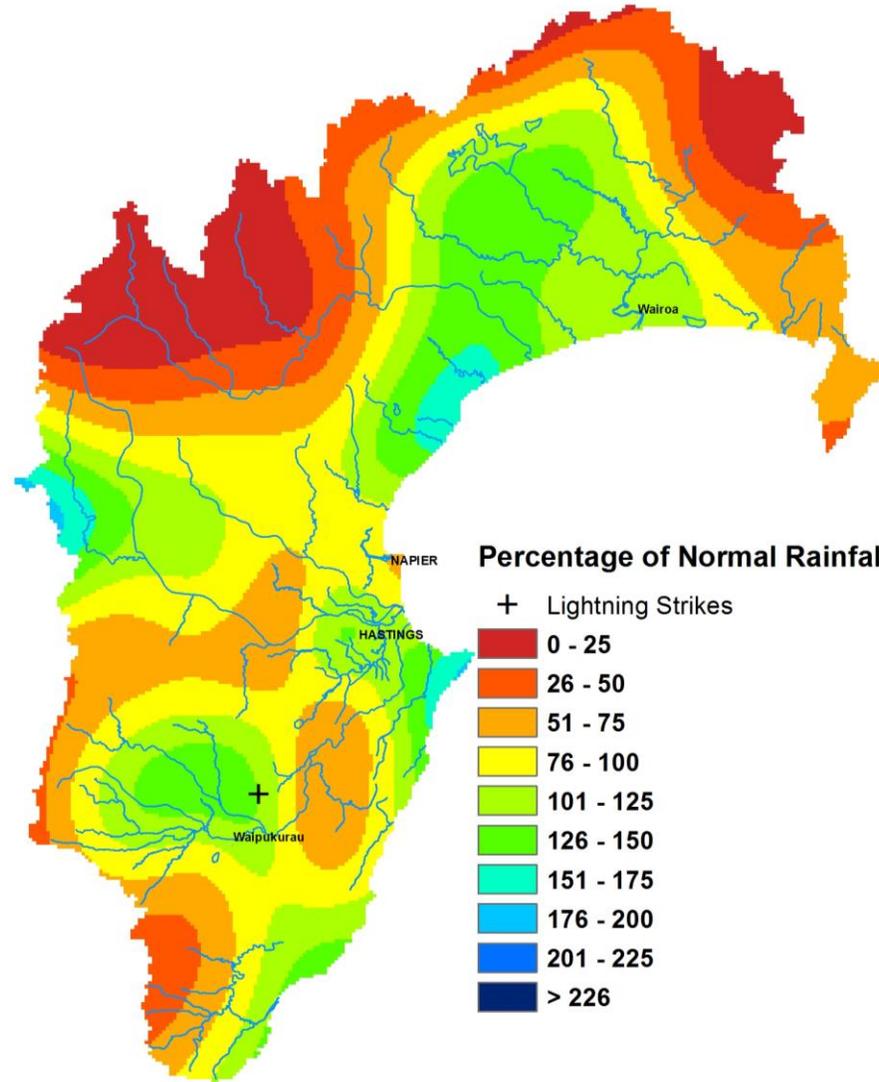
Near enough to normal. One cloud to ground lightning strike.

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

Percentage of normal October rainfall
(30 year average)

For areas in the region:

| | |
|---------------------------|------------|
| Waikaremoana | 77% |
| Northern HB | 103% |
| Tangoio | 91% |
| Kaweka | 102% |
| Ruahine | 61% |
| Heretaunga Plains | 86% |
| Ruataniwha Plains | 106% |
| Southern HB | 91% |
| Hawke's Bay Region | 90% |



TEMPERATURES

Well above average.

Mean Difference from Normal

Maximum Temperature: 1.2 °C

Minimum Temperature: 1.0 °C

Mean Daily Maximum: 18 °C

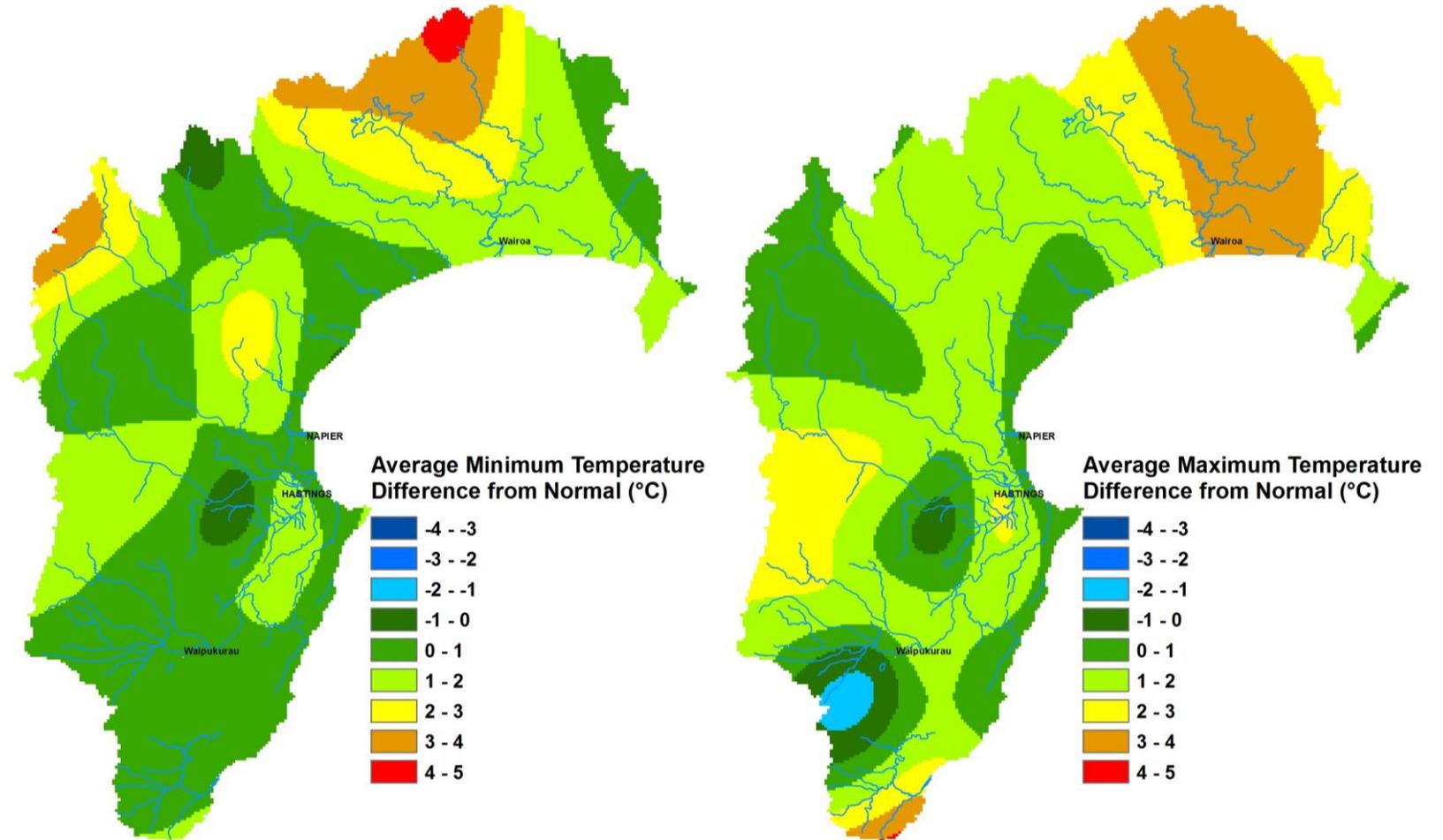
Mean Daily Minimum: 8 °C

Highest Daily: 30.8°C

Location: Wairoa North Clyde EWS

Lowest Daily: -1.2 °C

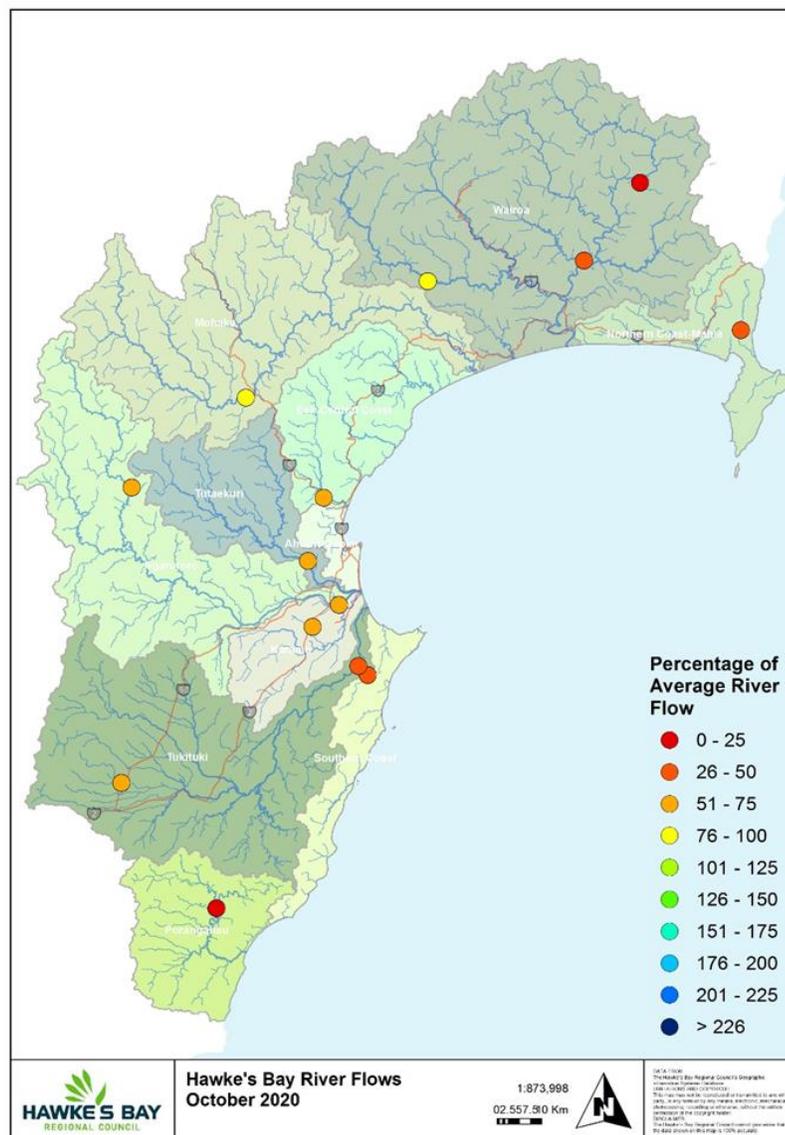
Location: Ongaonga



RIVER FLOW

Percentage of average October flows
for areas in the region:

| | |
|------------------------------|------------|
| Northern Coast – Mahia | 28% |
| Northern HB – Hangaroa River | 24% |
| Northern HB – Wairoa River | 31% |
| Northern HB – Waiau River | 80% |
| Mohaka | 86% |
| Esk-Central Coast | 54% |
| Tūtaekuri | 52% |
| Karamu | 61% |
| Ngaruroro – Kuripapango | 75% |
| Ngaruroro – Chesterhope | 60% |
| Southern Coast | 41% |
| Tukituki – Tukipo River | 66% |
| Tukituki – Tukituki River | 47% |
| Porangahau | 14% |
| Hawke's Bay Region | 51% |



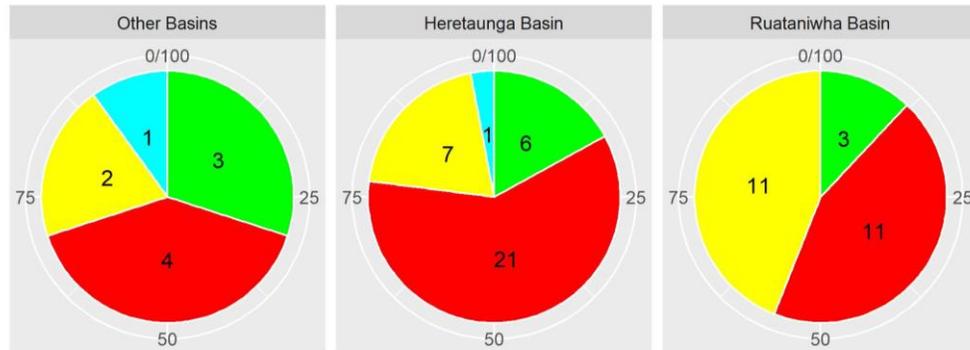
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Near normal.

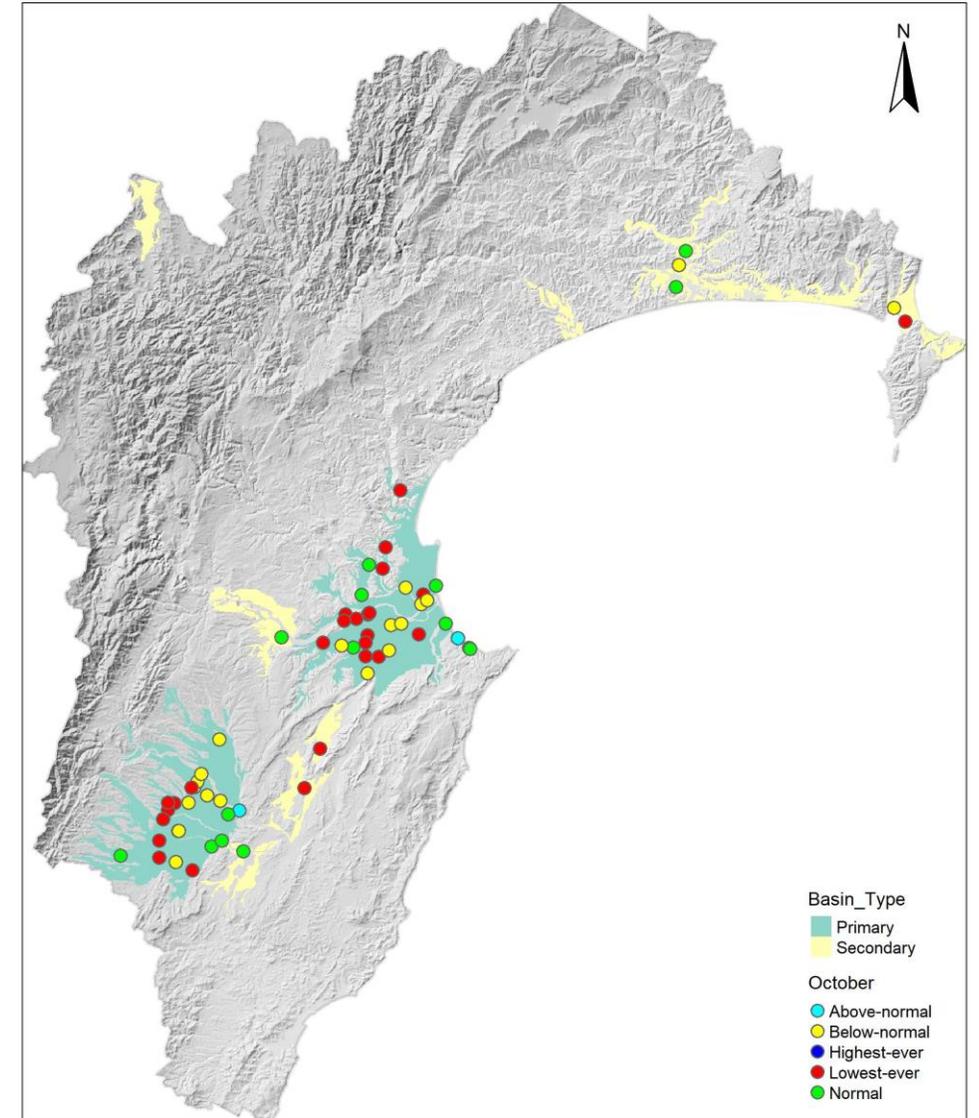
Current state of Groundwater levels:

This report compares groundwater levels in October 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

La Niña is here for our summer and may linger into autumn too.

Sea level pressures are expected to be higher than usual over eastern and southern New Zealand and lower to the northwest of the country. That sets up an onshore, easterly flow over Hawke's Bay with reasonable prospects of bringing us moist air. Good for avoiding drought. Maybe not so good for those of us with solar ovens that sit twiddling thumbs under cloudy skies.

All the seasonal forecast models indicate we'll get warmer than usual temperatures and near or above normal rainfall over the next three months. Above normal might be a stretch because they simultaneously pick higher pressures for the region. So near normal might be more the story, though NIWA suggests even below normal rainfall is in with a show.

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