



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

December 2019


HAWKES BAY
REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

December 2019

Apart from manky weather over Christmas, to underwhelm visiting relatives, December wasn't bad for taking to the outdoors. Many of our swimming spots have been on a good run for water quality and December temperatures encouraged splashing about, being above average but not stifling and really only matching the freakish November heat.

Rainfall was typical for summer in northern areas of the region and low around and south of the Heretaunga Plains. The latter isn't terrific news, given that it follows a very dry November. River flows are mostly below normal and really quite low in parts of Central Hawke's Bay. Groundwater levels are showing the effects of the dry November and soil moisture is looking low in the southern half of the region but okay in northern areas.

Normally our air quality doesn't rate a mention in summer but it's hard not to notice the occasional murkiness attributable to the Australian bushfires. This was most evident in our particulate measurements in early December but they didn't exceed our air quality standard. It's a hazard that becomes all too close and real as our conditions dry.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY

An okay start to the summer – warm, middling rainfall

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

January to March Forecast:

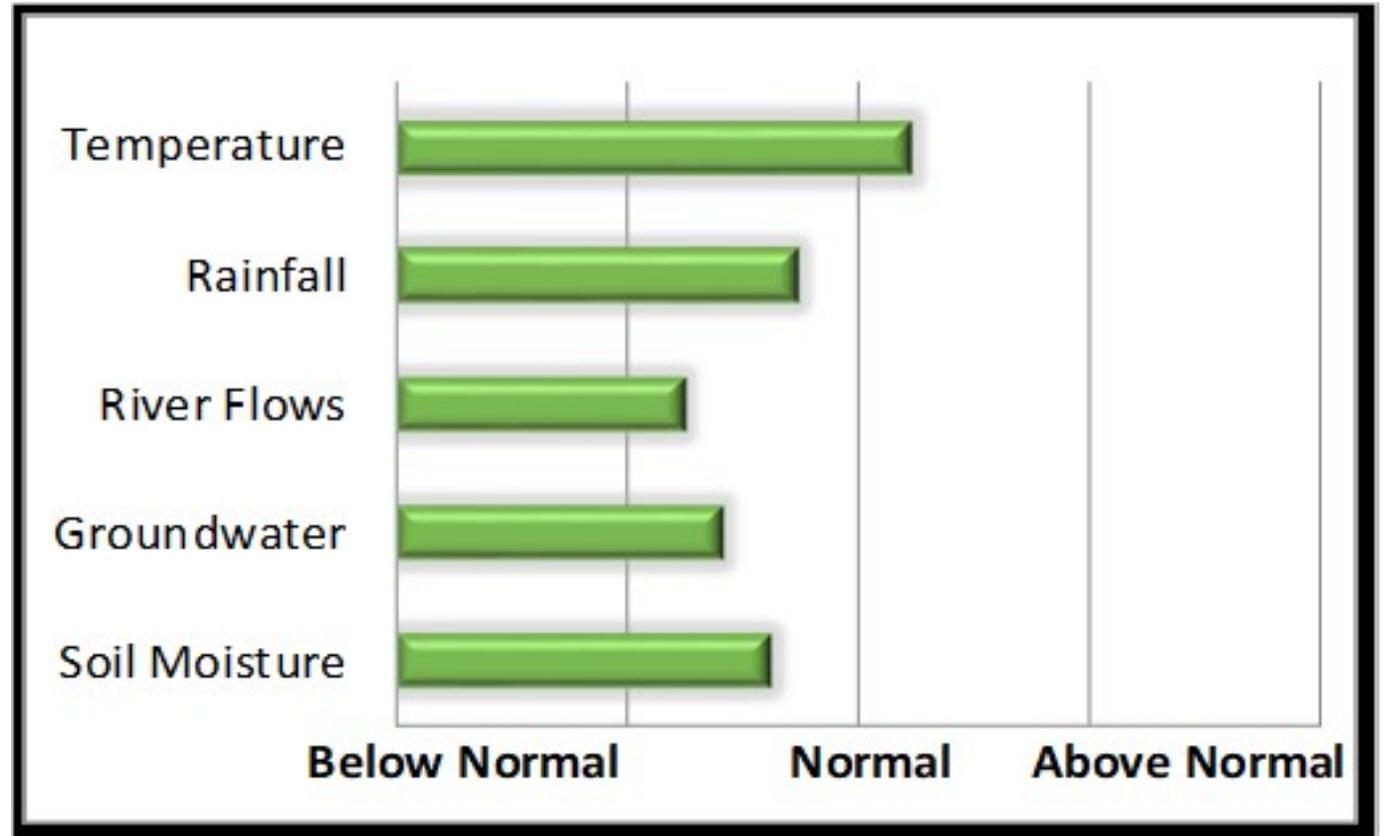
Temperature	Near or above average
Rain	Near normal
River flows	Below or near normal
Soil moisture	Below or near normal

source : NIWA

For more information

www.hbrc.govt.nz

P: 06 835 9200



RAINFALL

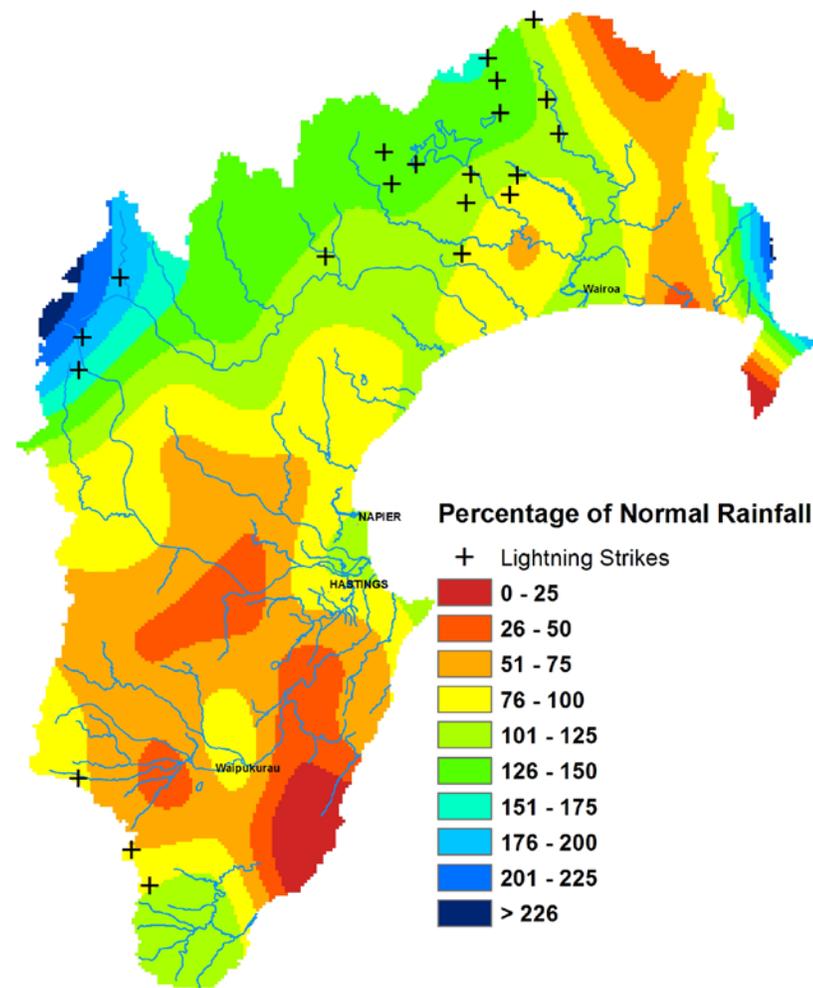
Near normal for the region but drier than average on the Plains. Twenty one cloud to ground lightning strikes.

Percentage of normal December rainfall
(30 year average)

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

For areas in the region:

Waikaremoana	115%
Northern HB	103%
Tangoio	88%
Kaweka	99%
Ruahine	72%
Heretaunga Plains	69%
Ruataniwha Plains	61%
Southern HB	78%
Hawke's Bay Region	86%



TEMPERATURES

Above average

Mean Difference from Normal

Maximum Temperature: 0.8 °C

Minimum Temperature: 0.8 °C

Mean Daily Maximum: 22 °C

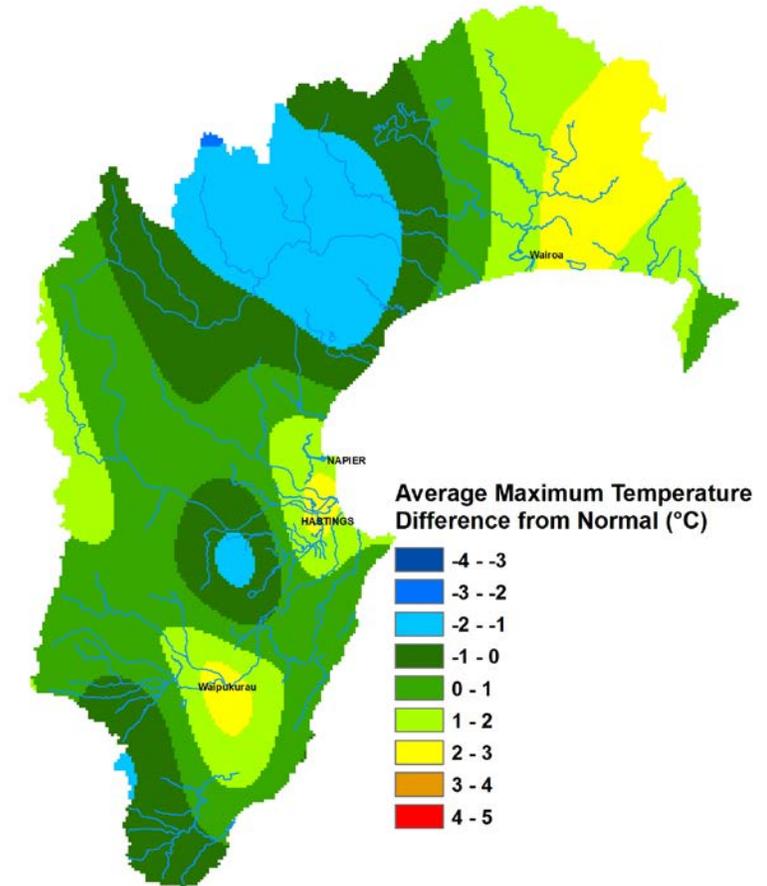
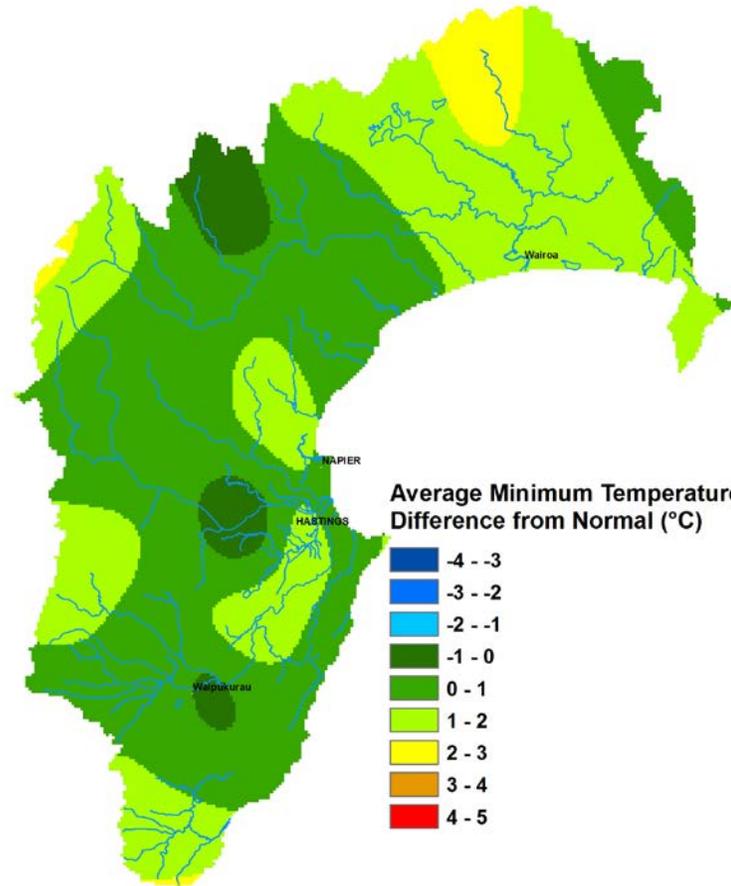
Mean Daily Minimum: 12 °C

Highest Daily: 30.4°C

Location: Wairoa North Clyde EWS

Lowest Daily: 1.9 °C

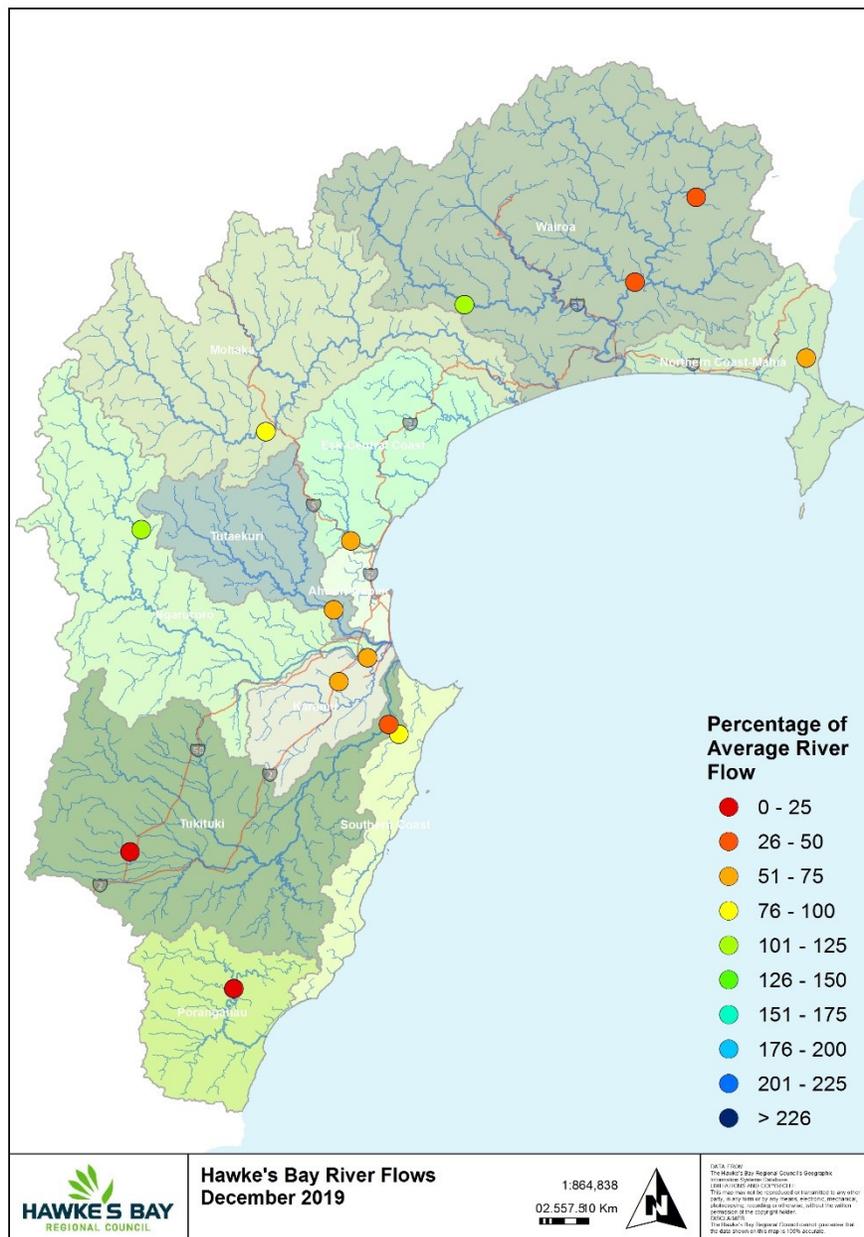
Location: Taharua



RIVER FLOW

Percentage of average December flows
for areas in the region:

Northern Coast – Mahia	66%
Northern HB – Hangaroa River	43%
Northern HB – Wairoa River	50%
Northern HB – Waiau River	108%
Mohaka	79%
Esk-Central Coast	70%
Tūtaekuri	53%
Karamu	59%
Ngaruroro – Kuripapango	123%
Ngaruroro – Chesterhope	71%
Southern Coast	87%
Tukituki – Tukipo River	21%
Tukituki – Tukituki River	29%
Porangahau	2%
Hawke's Bay Region	61%

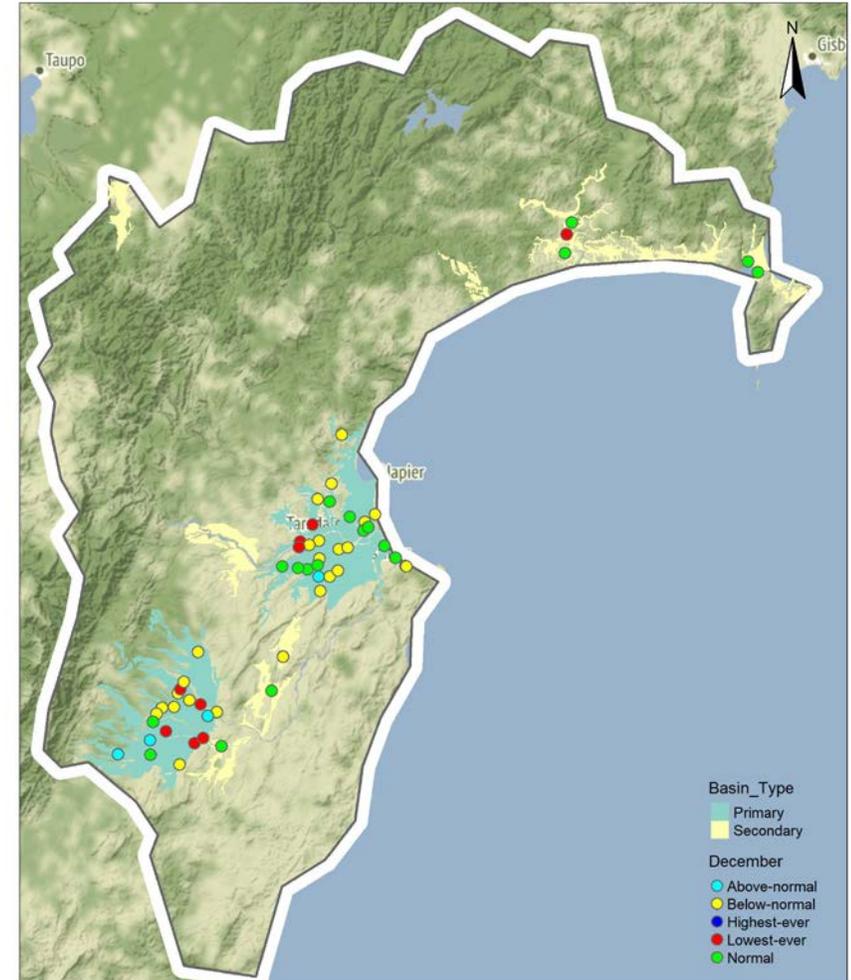
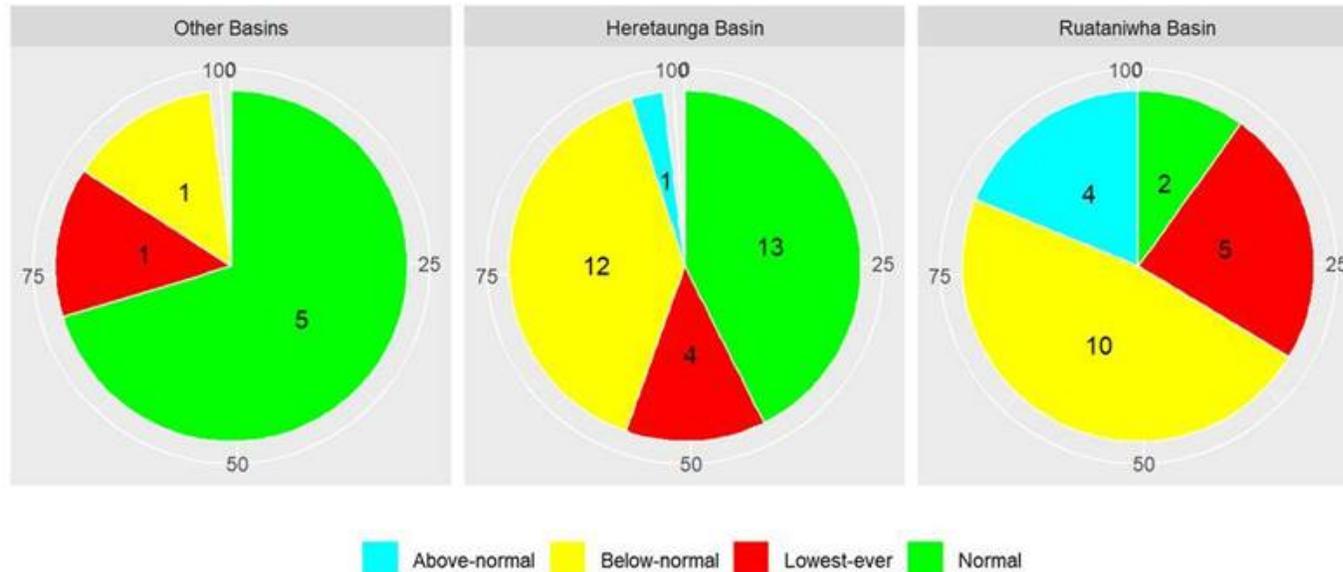


GROUNDWATER & SOIL MOISTURE

Soil Moisture: below normal for most areas but near normal in Northern Hawke's Bay.

Current state of Groundwater levels:

This report compares groundwater levels in December 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.



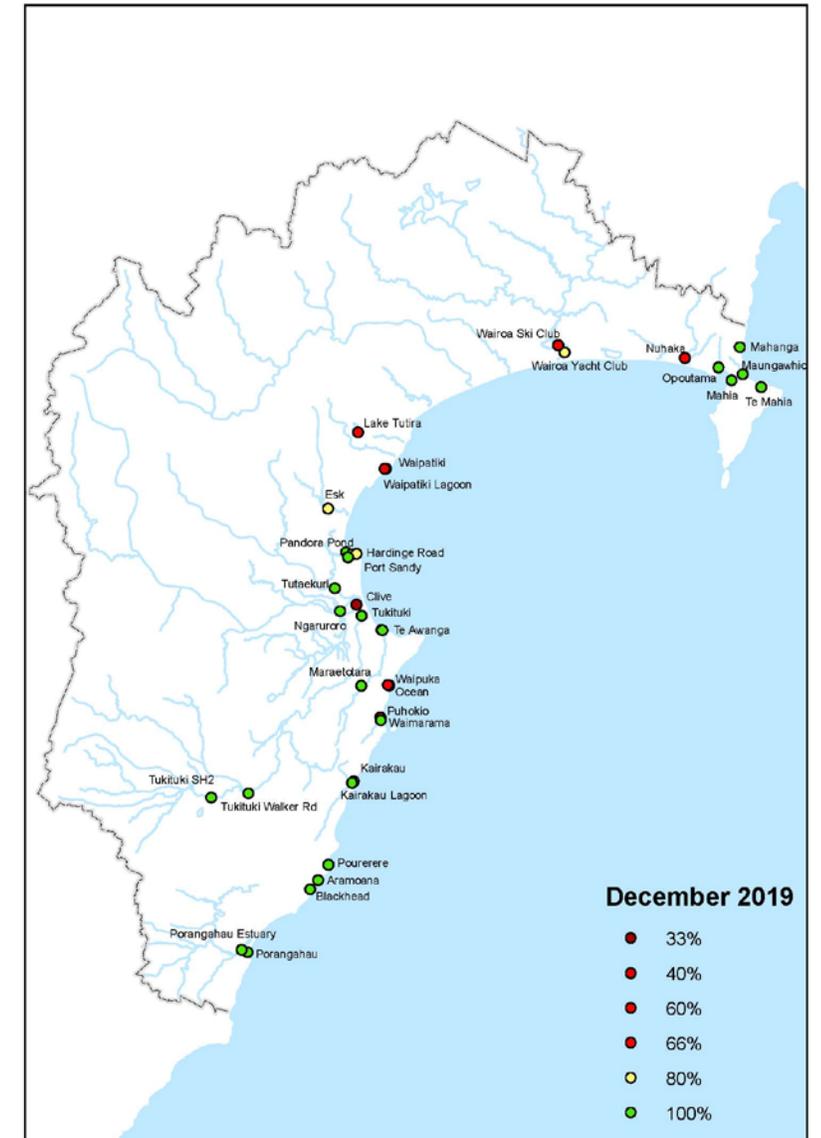
RECREATIONAL WATER QUALITY

Water quality at our recreational swim spots throughout December was generally pretty good.

The heavy falls of rain in the North caused a few exceedances but otherwise there were very few throughout the remainder of the region that were related to rainfall. The coastal lagoons continue their poor water quality form with a number of 'unsuitable for swimming' results across the month. Permanent signage is being worked on for a number of sites which regularly exceed limits, these will help inform the public of the risks at these sites.

Pandora Pond continues to have a good run with no exceedances this season to date, great to see with so many people choosing this site for a dip over the Christmas period.

The Southern beaches (Kairakau to Porangahau) were also the place to be keeping cool with excellent recreational water quality in December.



LONGER FORECAST

I mentioned last time that the pattern of westerlies would change in the New Year. Maybe not so much. The outlook for the next few months is for lower than normal pressures extending down the east coast and to the south of the country. It paints a picture of more westerlies, though easing in March. The short term forecasts also show a good respite and a high dominating mid-January.

The forecast lower pressures bring the potential of frontal activity and occasional bursts of rain, so near normal rainfall is expected over the period. Temperatures look to be fairly average too, as chances are we'll get some southerly flicks as fronts pass and just recently sea surface temperatures have cooled.

Kathleen Kozyniak
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