



# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

January 2024



TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

## January 2024

January was wet. While the month was marked by a few scattered rainfalls throughout, the particularly soggy end took us to well above normal totals. The region had 184% of average January rainfall with most areas reaching close to two times their average. Tangoio was especially wet receiving 232%.

The high rainfall shifted the declining soil moisture levels to near or above average. River flows were normal or slightly above normal while groundwater levels were normal.

Temperatures were 0.8°C warmer than usual during daytime then climbing to 1.9°C warmer overnight. Like December, our air quality was good where no exceedances of PM10 were reported.

January's weather was as bit of a rollercoaster- some beautiful hot days followed by a cooler, wet finale. Water quality followed this swing in weather with most of our beaches and rivers providing the perfect cool down for those hot days at the start and then things got a bit iffy for some after that rainfall stint. But atleast the northern beaches and those south of Waimarama remained great swimming spots towards the end of January.

**Nariefa Abraham-Bennet**  
Senior Climate Scientist

## SUMMARY January 2024

### Short summary

Hot and a rather wet end.

### February to April Forecast

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

source : NIWA

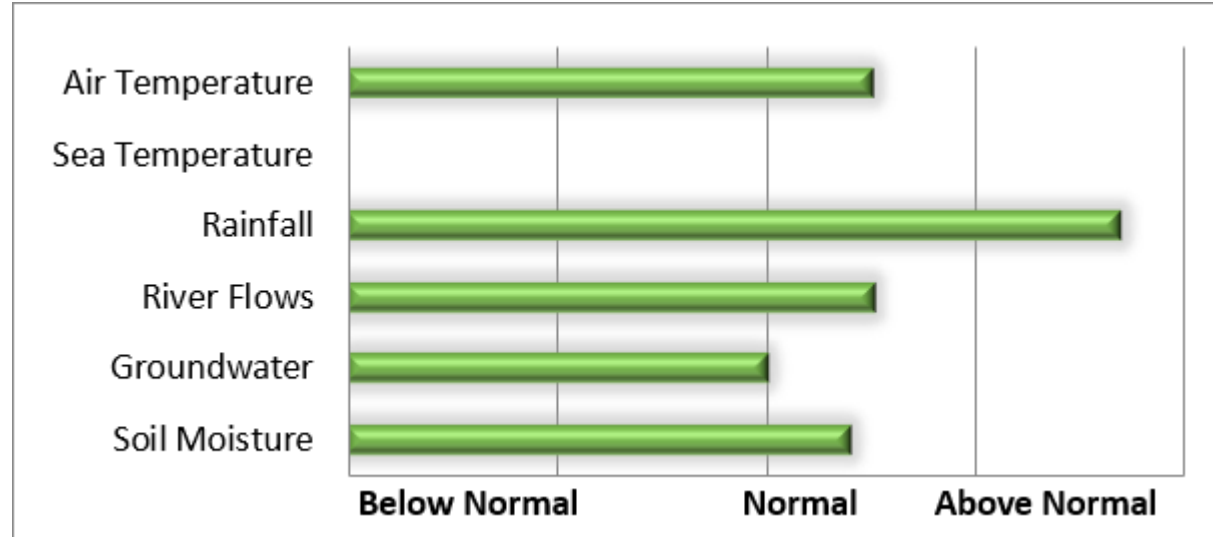
### Sea Surface Temperature

The average sea surface temperature (SST) for Hawke's Bay in January 2024 is unavailable due to the HBRC coastal water quality monitoring buoy HAWQi being removed for servicing.

### For more information

[www.hbrc.govt.nz](http://www.hbrc.govt.nz)

Ph: 06 835 9200





## RAINFALL

Above normal, especially Tangoio. Fourteen cloud to ground lightning strikes.

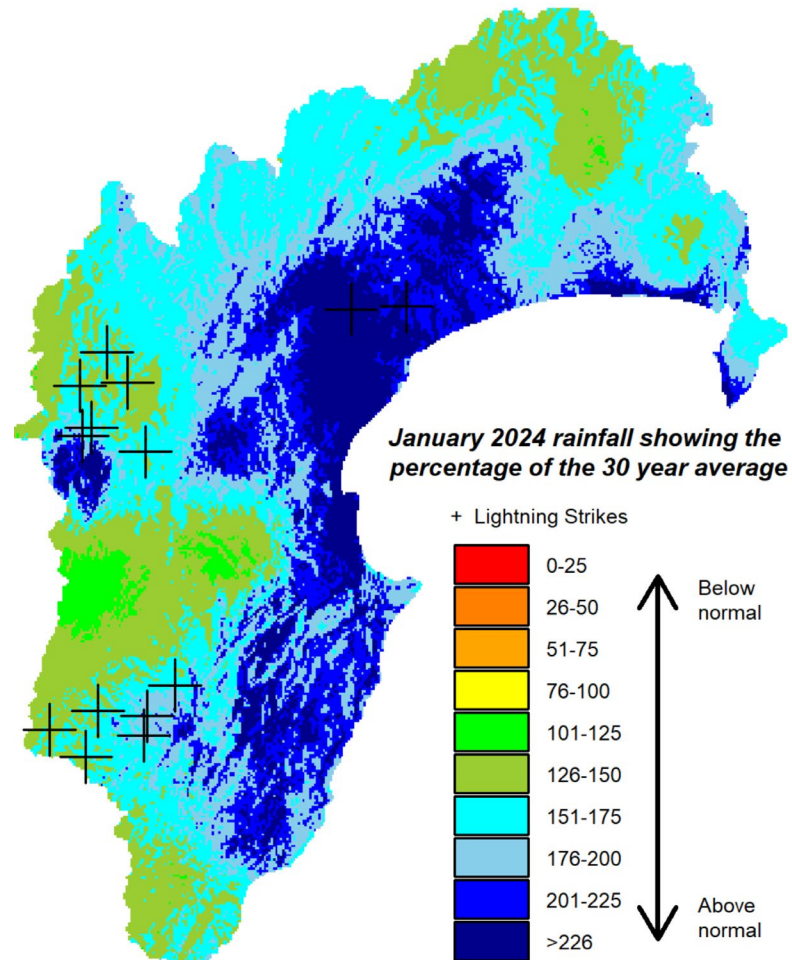
*Lightning counts come from the Blitzortung.org lightning network to which HBRC contributes.*

Percentage of normal January rainfall  
(30 year average)

### For areas in the region:

Waikaremoana	169%
Northern HB	187%
Tangoio	232%
Kaweka	173%
Ruahine	129%
Heretaunga Plains	196%
Ruataniwha Plains	191%
Southern HB	197%
<b>Hawke's Bay Region</b>	<b>184%</b>

For a more detailed rainfall report click [here](#).  
and for a five-year monthly summary click [here](#).

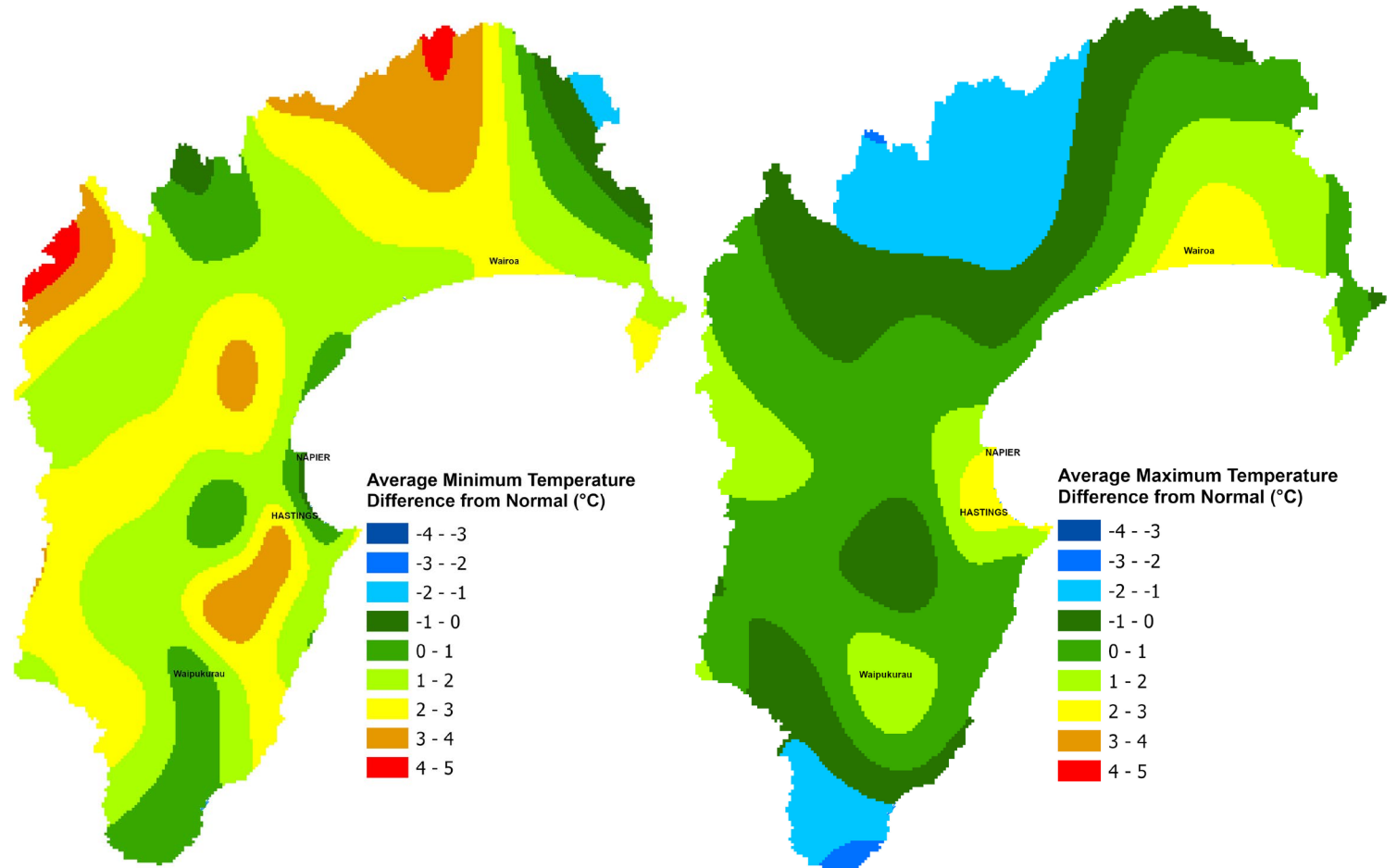


## AIR TEMPERATURES

**Temperatures** – Above average, especially nights.

Mean Difference from Normal  
Maximum Temperature: 0.8°C  
Minimum Temperature: 1.9°C

Mean Daily Maximum: 23°C  
Mean Daily Minimum: 14°C  
Highest Daily: 33.6 °C  
Location: Hastings AWS (MetService)  
Lowest Daily: 4.7 °C  
Location: Taharua Climate

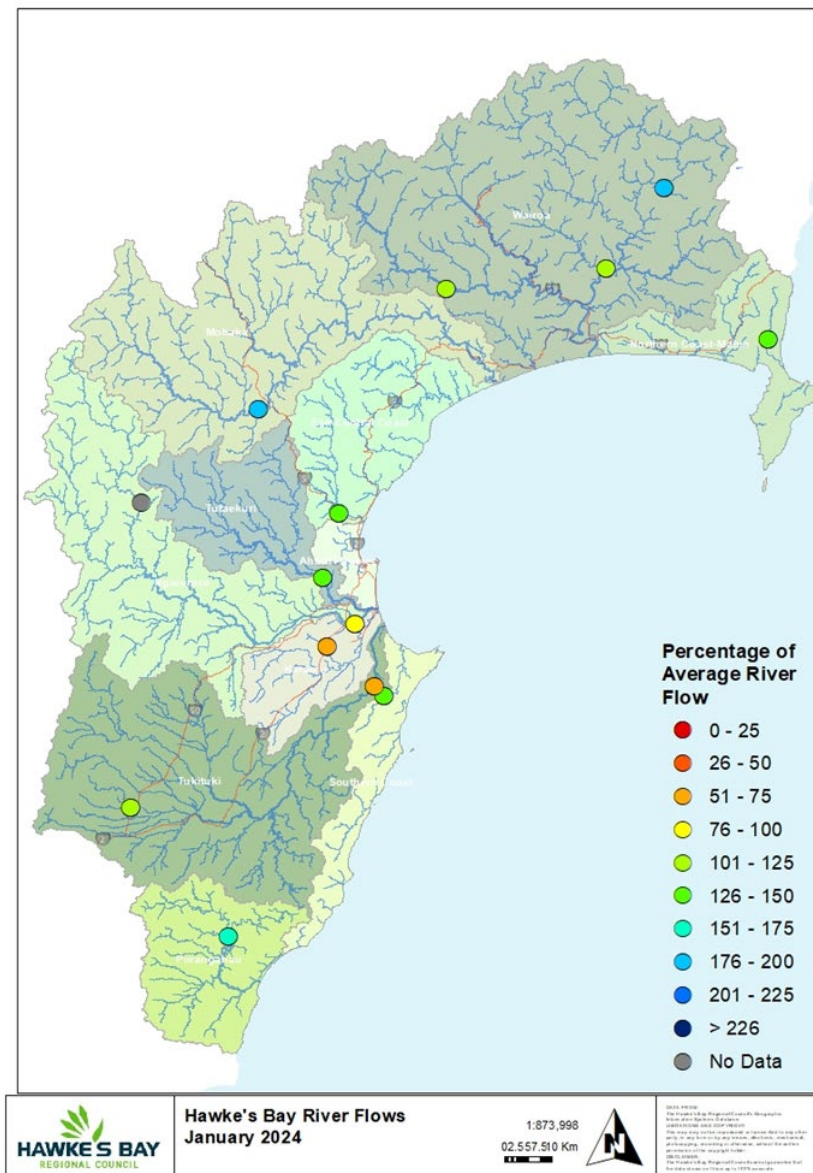


## RIVER FLOW

Percentage of average January flows  
for areas in the region:

Northern Coast – Mahia	141%
Northern HB – Hangaroa River	195%
Northern HB – Wairoa River	115%
Northern HB – Waiau River	111%
Mohaka	179%
Esk-Central Coast	141%
Tūtaekuri	136%
Karamu	58%
Ngaruroro – Kuripapango	NA
Ngaruroro – Chesterhope	76%
Southern Coast	132%
Tukituki – Tukipo River	109%
Tukituki – Tukituki River	75%
<u>Porangahau</u>	<u>167%</u>
<b>Hawke's Bay Region</b>	<b>126%</b>

For a more detailed river flow report click [here](#).



## GROUNDWATER & SOIL MOISTURE

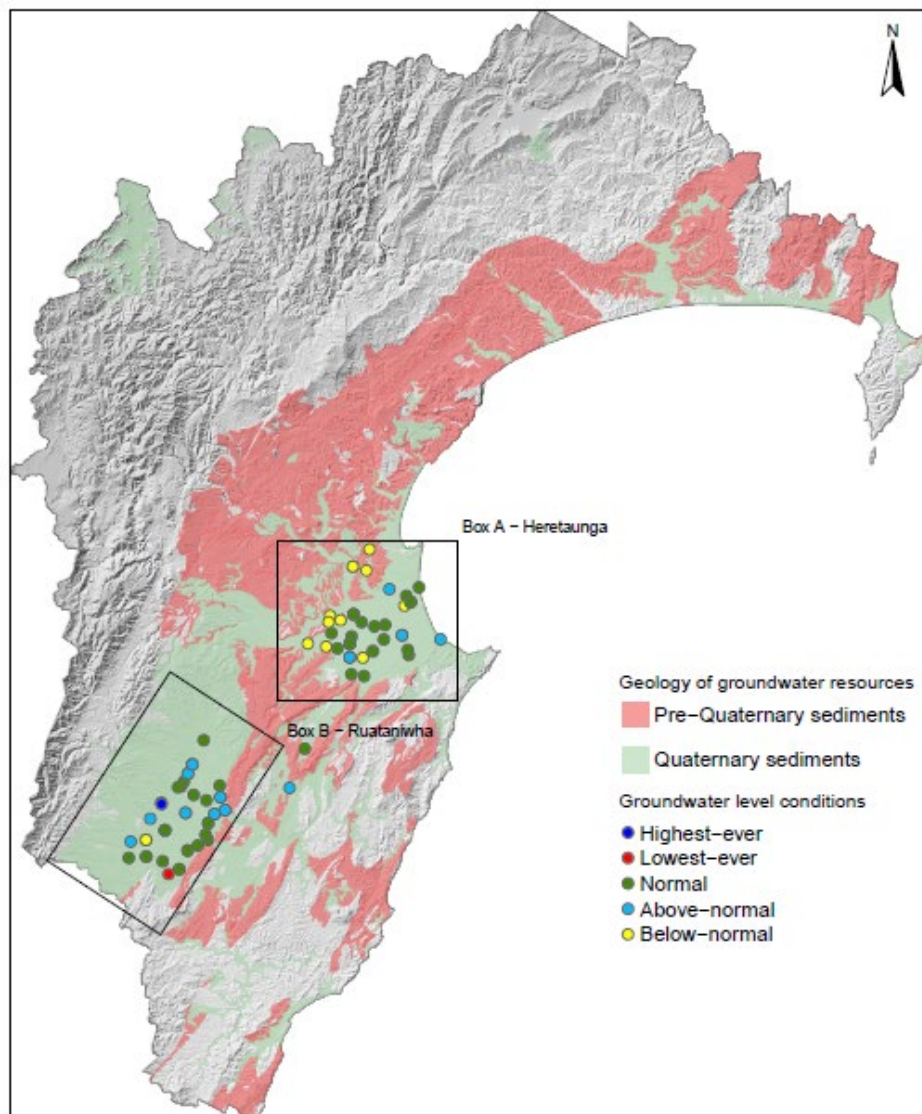
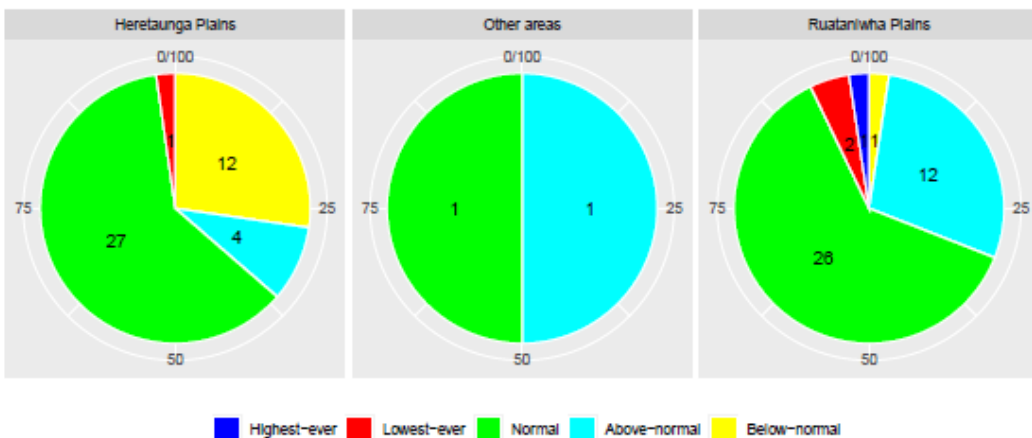
**Soil Moisture:** Near to above average.

For a more detailed soil moisture report click [here](#).

### Current state of Groundwater levels:

This report compares groundwater levels in January 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.





## AIR QUALITY

**Air Quality:** All okay. No exceedances

**Figure 1:** PM<sub>10</sub> levels in the Napier, Hastings and Awatoto airsheds during January 2024.

### PM<sub>10</sub> exceedances:

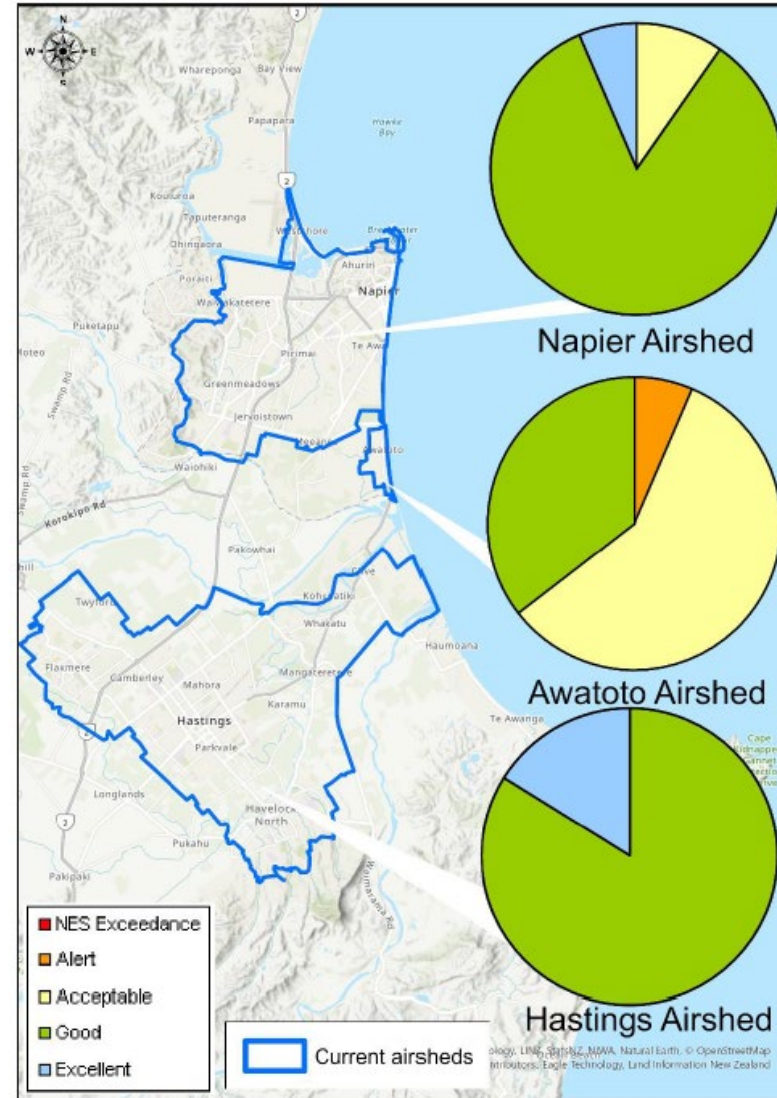
*The National Environmental Standard (NES) for particulate matter (PM<sub>10</sub>) of 50 micrograms per cubic metre (24 hour average) was not exceeded in the Napier, Hastings and Awatoto airsheds during January 2024.*

The monitoring sites are located at:

- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.
- Waitangi Road in the Awatoto airshed.

Further information is available at [www.hbrc.govt.nz](http://www.hbrc.govt.nz)

For a more detailed air quality report click [here](#).



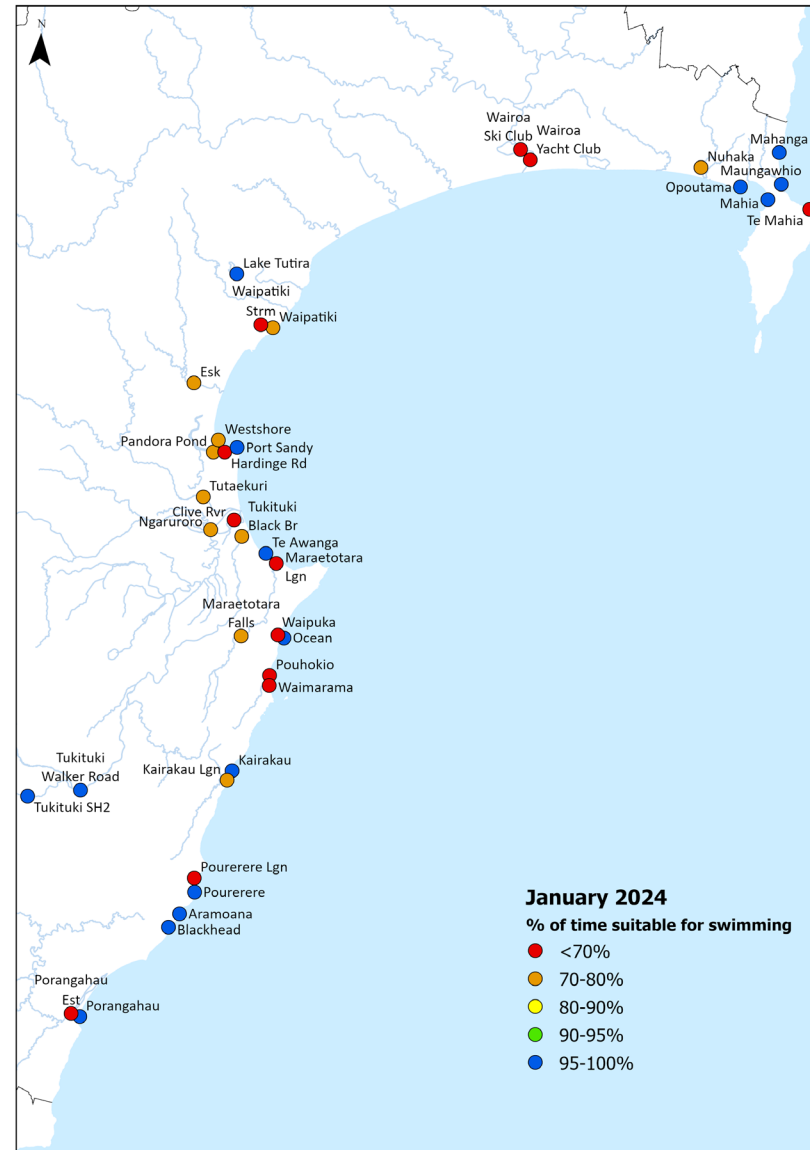


## Recreational Water Quality

It was a hot, sunny start to 2024 with most sites performing best in the dry conditions experienced in the first few weeks of January. Heavy rainfall in the latter half of the month impacted swimmability at certain rivers and beaches, making them less suitable for swimming compared to December. Despite these fluctuations, the northern beaches and those south of Waimarama remained inviting destinations for a refreshing dip.

Further information is available [here](#).

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## LONGER FORECAST

The El Niño event continues for the time being, but it is expected to wane to neutral conditions during the autumn. The influence of the Madden Julian Oscillation in stirring up tropical convection hasn't yet gone away. Sea surface temperatures are still above average along our coast and adding heat to our temperatures. The seasonal outlook doesn't shift a great deal from previous months with higher-than-normal sea level pressure expected north of the country and lower to the south, however the strength of those patterns is less convincing or strong than before.

The pattern suggests continued favouring of a westerly component to our winds and warmer weather than usual over the coming three months. Seasonal forecast models suggest rainfall will likely be near normal, which seems fair giving those warm seas and the pattern of rainfall we've had so far this summer!

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