

June 2018

# Hawke's Bay Trends

TEMPERATURES  
RAINFALL  
RIVER FLOW  
GROUNDWATER & SOIL  
LONGER FORECAST  
AIR QUALITY

THE STATE OF OUR ENVIRONMENT

## June 2018

We doubled down on winter in June, hopefully that means winter gets shortened by a month. June was both colder and wetter than usual. There were more rain days than not (27 days of a least a shower at our Gwavas site!) and rainfall was twice the average over most of the region. River flow and soil moisture levels are above normal and groundwater levels got a good top up. The latter is the silver lining to the rainfall figures but any lining to the cold daytime temperatures is grey and smelly. The air quality standard for PM10 was exceeded on once in the Napier, Hastings and Awatoto airsheds. Light winds, cold temperatures and fires going gangbusters are to blame in Napier and Hastings. Sea spray is the likely culprit in Awatoto, having occurred on the wettest, windiest, stormiest day all month. You can't win.

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**Principal Scientist Climate and Air**



**The short summary**

Yuck. Wet, cold and a bit smoky.

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

**July to September**

**Temperature**    *Near or above average*

**Rain**            *Near or above normal*

**River flows**    *Above normal*

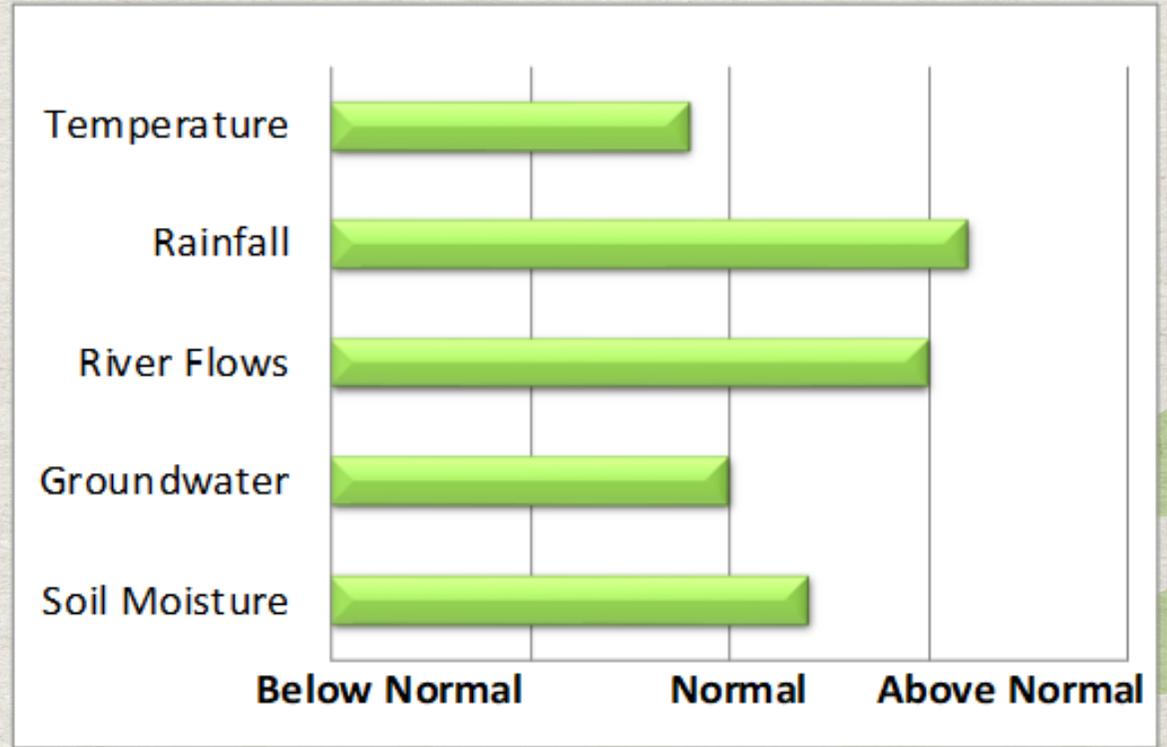
**Soil moisture**   *Above normal*

*(source : NIWA)*

For more information

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

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# RAINFALL

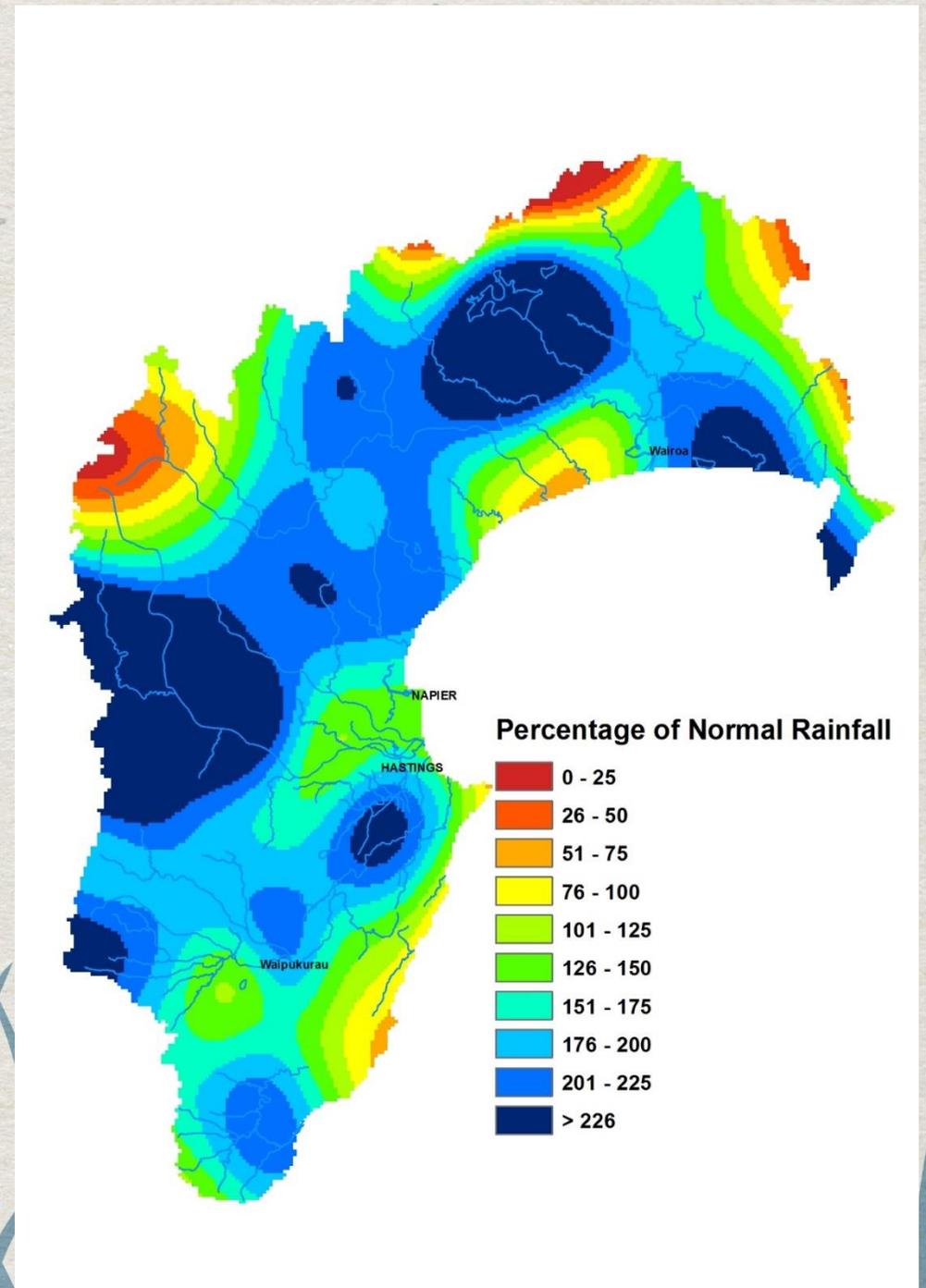
Rainfall – Twice the average for most and no lightning strikes (cloud to ground) over land

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

Percentage of normal May rainfall  
(30 year average)

**For areas in the region:**

Waikaremoana	220%
Northern HB	173%
Tangoio	213%
Kaweka	267%
Ruahine	221%
Heretaunga Plains	178%
Ruataniwha Plains	180%
Southern HB	170%
<b>Hawke's Bay Region</b>	<b>203%</b>



# TEMPERATURES

Cold during the day and average winter nights

## Mean Difference from Normal

Maximum Temperature:  $-0.6^{\circ}\text{C}$

Minimum Temperature:  $0.2^{\circ}\text{C}$

Mean Daily Maximum:  $12^{\circ}\text{C}$

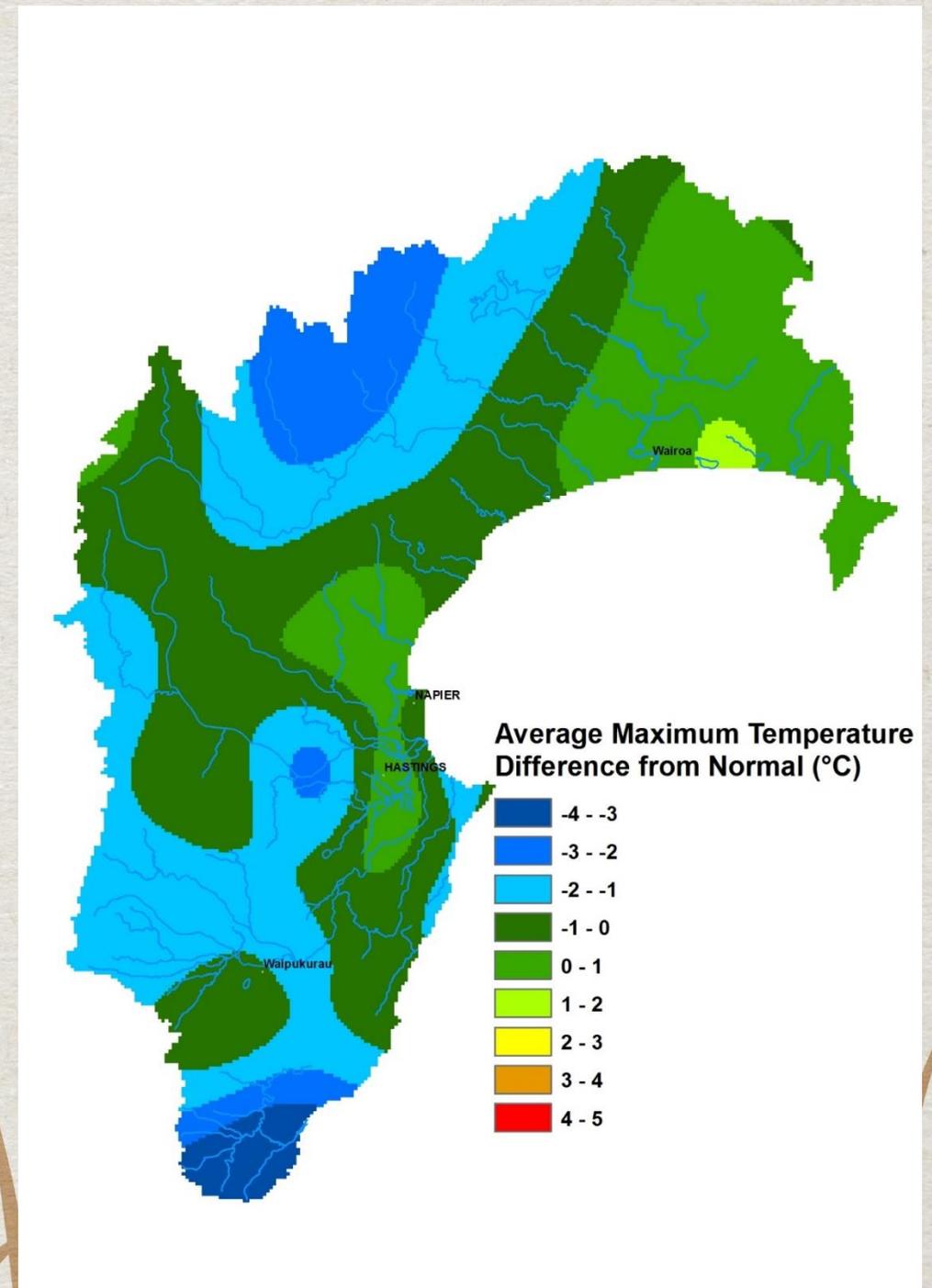
Mean Daily Minimum:  $4^{\circ}\text{C}$

Highest Daily:  $20.1^{\circ}\text{C}$

Location: Napier EWS

Lowest Daily:  $-6.1^{\circ}\text{C}$

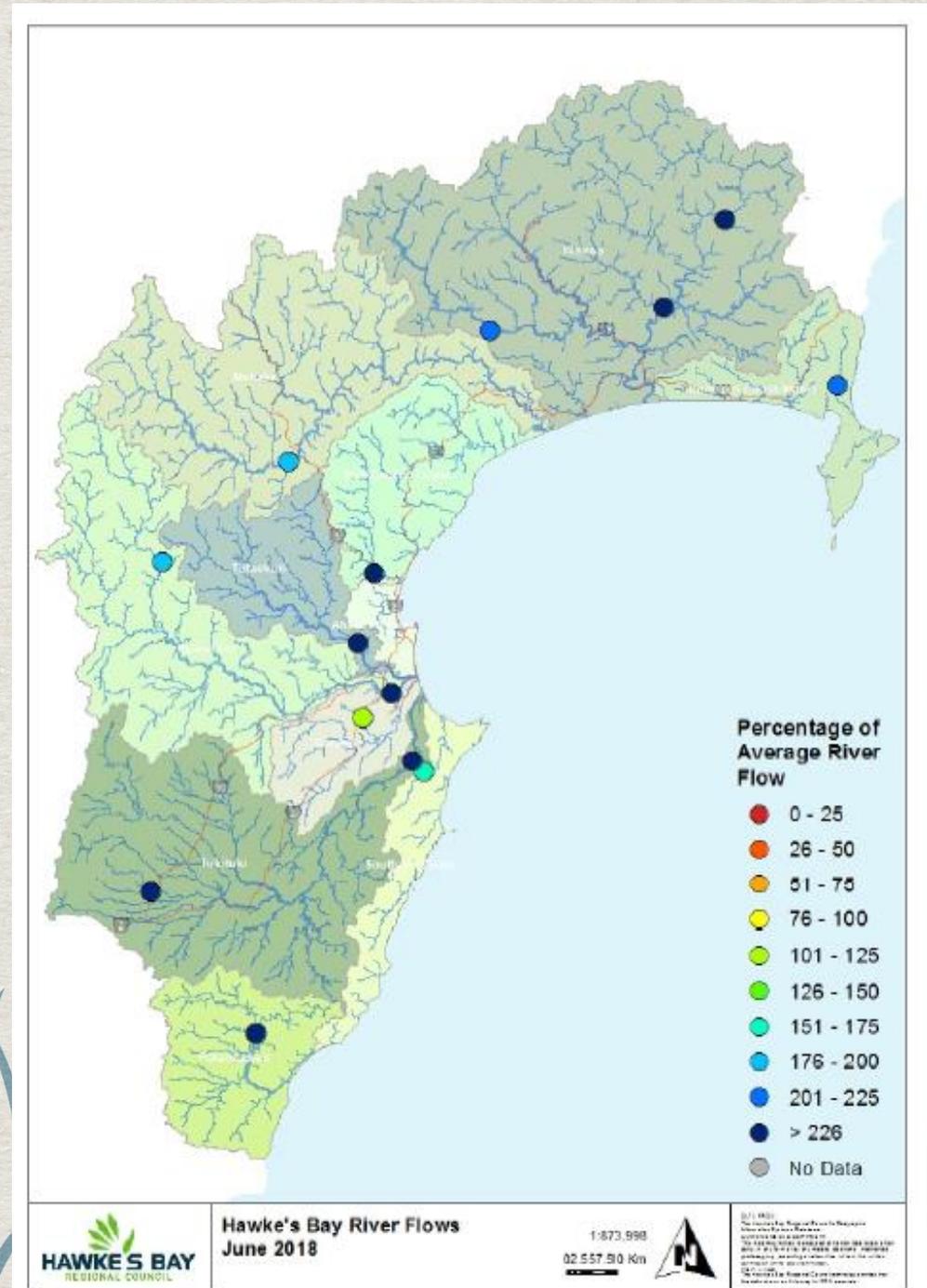
Location: Taharua



# RIVER FLOW

## Percentage of average June flows for areas in the region:

Northern Coastal	203%
Northern HB – Hangaroa River	259%
Northern HB – Wairoa River	274%
Northern HB – Waiau River	202%
Mohaka	186%
Central Coastal	297%
Tūtaekuri	249%
Karamu	116%
Ngaruroro - Upper	176%
Ngaruroro - Lower	299%
Southern Coastal	165%
Ruataniwha Plains	289%
Tukituki	270%
<u>Southern HB</u>	<u>418%</u>
<b>Hawke's Bay Region</b>	<b>243%</b>



# GROUNDWATER & SOIL MOISTURE

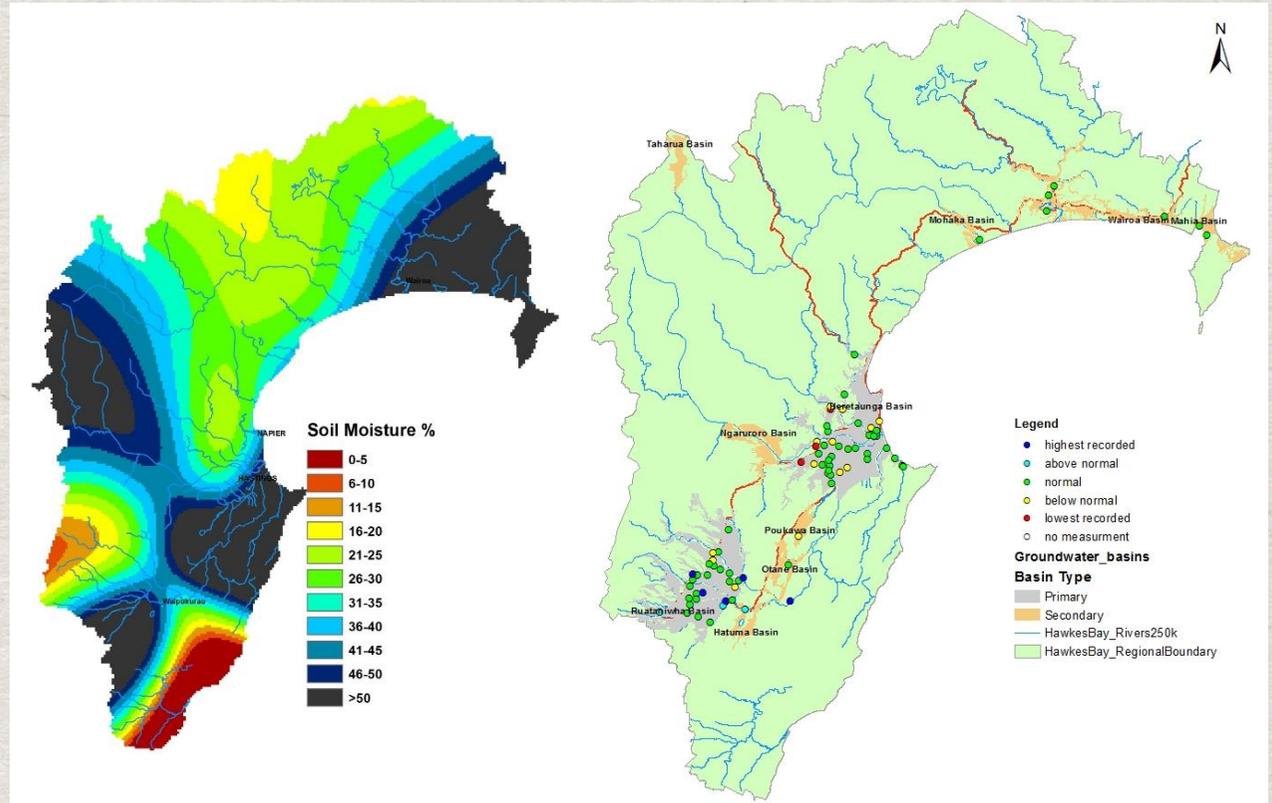
## Groundwater:

**Heretaunga basin:** Mostly normal water levels with some below normal and a few above normal water levels

**Ruataniwha basin:** Mostly normal and above/higher than normal water levels

**Secondary basins:** Mostly above normal water levels and normal water levels

**Soil Moisture:** Above normal



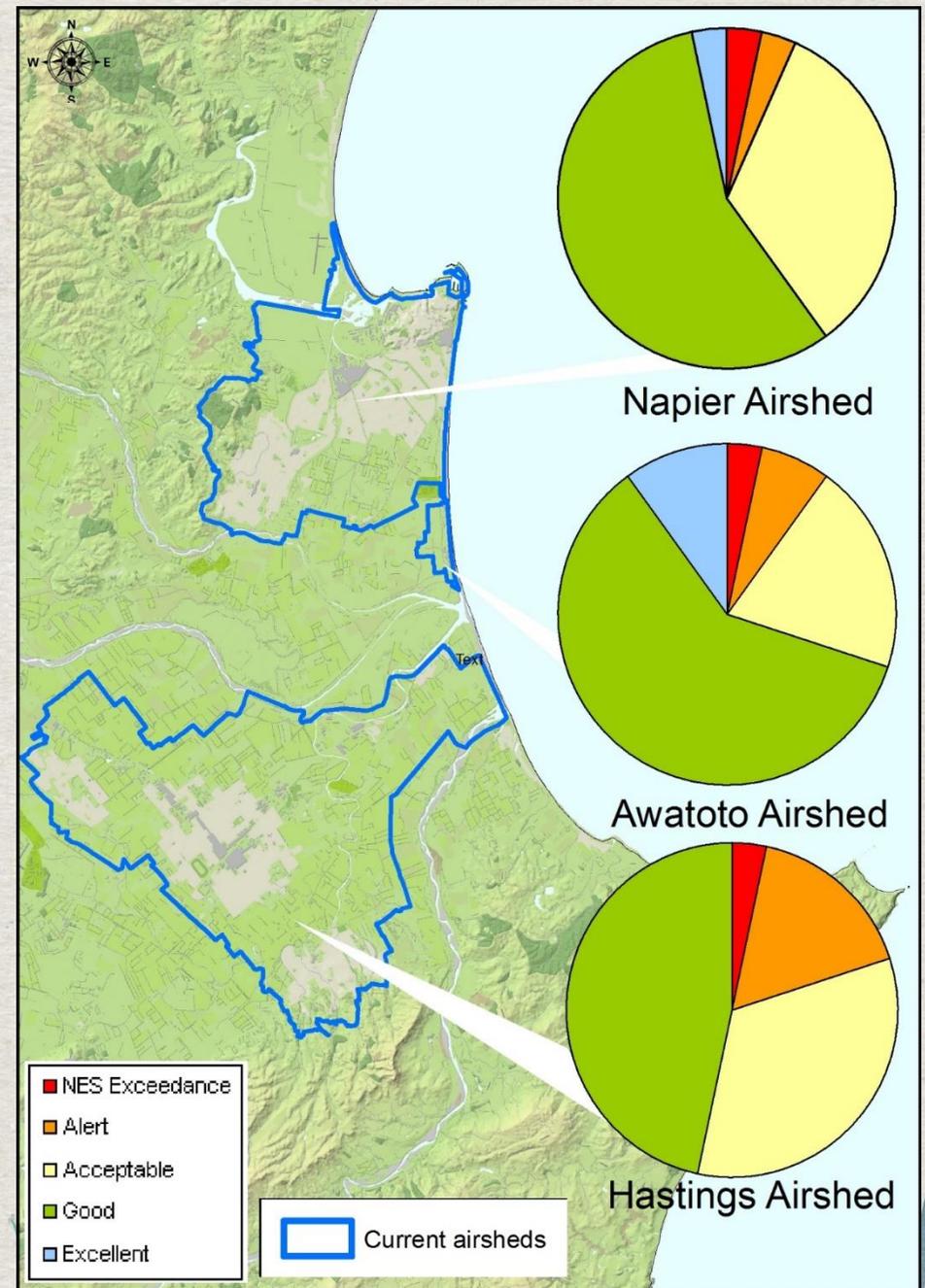
Sad. Napier, Hastings and Awatoto all had one exceedance of the PM10 standard

## PM10 exceedances:

The National Environmental Standard (NES) for particulate matter (PM10) of 50 micrograms per cubic metre (24 hour average) was exceeded on one occasion in the Awatoto, Napier and Hastings airsheds in June 2018.

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.



## LONGER FORECAST

Neutral El Niño-Southern Oscillation (ENSO) conditions persist but the odds are favouring El Niño developing in spring. And it isn't until around November that the weather patterns presented by the seasonal models start to have a look of El Niño about them. In the meantime, the next three months in particular, easterly flows still feature, as do lower pressures than normal over northern NZ and higher pressure to the south. Near normal temperatures and rainfall seem to be the go.