

State of the Environment Report Card 2017

What was the weather like?



2017 started very dry, windy and hot. Drought conditions loomed when only a third of normal January rainfall fell following two similarly dry months.

Thankfully, the heavens opened in February and we welcomed almost double the average for that month. It stayed wet and warm over the next few months and April was particularly stormy. Ex-tropical cyclone Debbie brought us a deluge, then Cook blew like the clappers, knocking down many trees. June heralded drier weather and bleaker than usual temperatures. Luckily, August gave us early spring warmth and most months in the latter half of the year wavered within their normal range for rainfall.

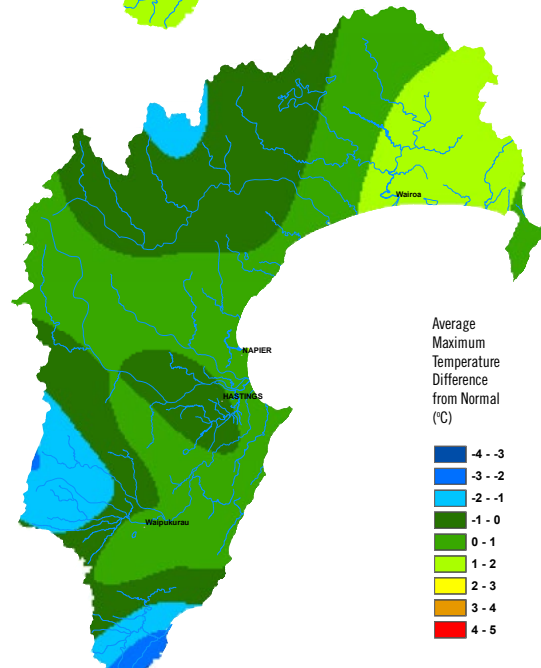
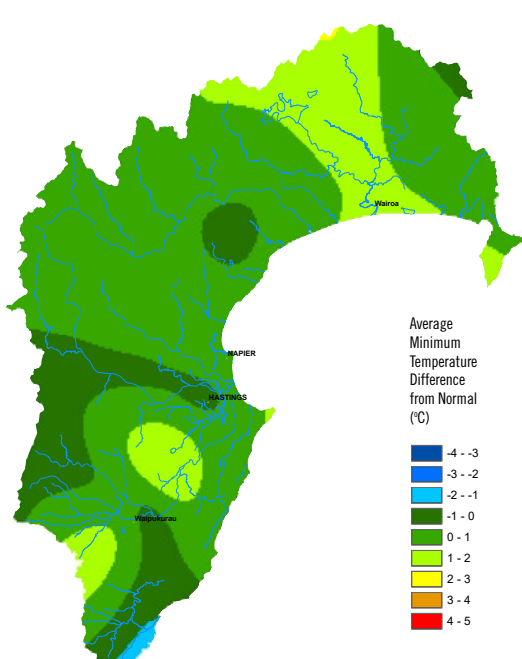
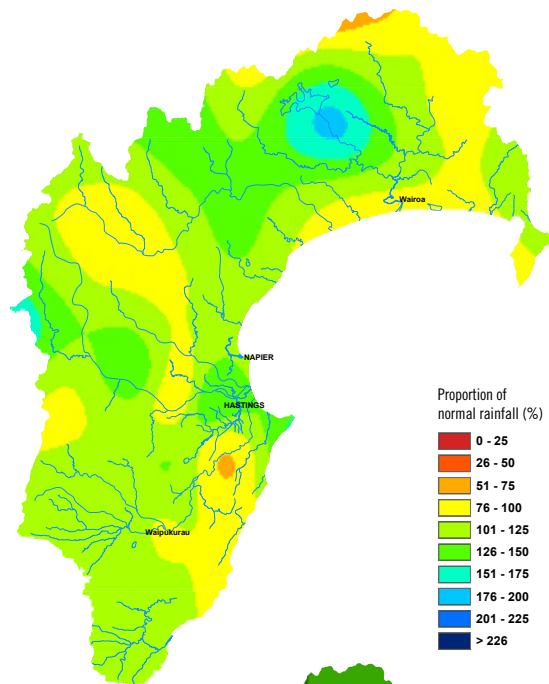
The El Niño-Southern Oscillation (ENSO) was in a neutral state throughout the year and it was only in December that a weak La Niña developed. That meant there was no strong influence guiding our weather patterns and 2017 ended with rainfall totals close to long-term averages. That included rainfall during spring, a season when the Indian Ocean Dipole, another influential weather driver (like ENSO), can exert itself, but it too was in neutral mode throughout the period.

Monitoring sites

HBRC monitors 74 telemetered rain gauges and has 27 volunteer rain gauge readers. 18 of the 74 telemetered sites are climate stations measuring temperature, wind and other parameters.

Annual rainfall was near normal (within 20% of the long-term average) across the region.

Annual average maximum temperatures were near normal, while minimum temperatures were above normal by 0.5°C.



State of the Environment Report Card 2017 Hawke's Bay's climate at a glance



The climate of Hawke's Bay is influenced largely by the terrain and the airstreams crossing New Zealand.

It is a region of highly variable and sporadic rainfall, and large and occasionally sudden temperature variations. Hawke's Bay is a sunny region, with most areas having over 2,000 hours of sunshine each year.

Hawke's Bay is less windy than many other coastal areas of New Zealand, experiencing a high frequency of very light winds. Consequently, a large number of frosts occur during the cooler months of the year.

Much of the rain in Hawke's Bay occurs when the wind directions are predominantly easterly or southerly. Rainfall is extremely variable in spring and summer, when westerly winds prevail over the country. In most years insufficient rainfall (dry spells) results in a total depletion of soil moisture to the extent that plant growth ceases.

The high country areas of Hawke's Bay are exposed, and gales occur frequently. Showers of snow are frequent during the winter months in cold southerly conditions.

Source: *The Climate and Weather of Hawke's Bay* - NIWA publication.

QUICK FACTS

The **highest** annual rainfall in 2017 - 3646.5 mm at Mt Manuoha (Waikaremoana)

The **lowest** annual rainfall in 2017 - 656.5 mm at Awanui (fringe Heretaunga Plains)

Highest one day rainfall in 2017 - 224 mm on 6th April at Mt Manuoha

The **warmest** temperature 35.5°C on 7th February at Wairoa North Clyde (NIWA)

The **coldest** temperature -7°C on 30th and 31st July at Taharua

Strongest wind gust in 2017 - 112 km/h on 14th June at Crownthorpe

Find out more

Hawke's Bay Regional Council monitors our land, water and air.

We use this data to inform our work with communities to improve and protect the environment.

Each year we develop a series of report cards to provide you with a snapshot of how our environment is tracking.

For more details including the full technical reports visit www.hbrc.govt.nz (search: report search)

For up to the minute monitoring results from Hawke's Bay and other parts of the country visit www.lawa.org.nz

