

MAY 2017

Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

TEMPERATURES
RAINFALL
RIVER FLOW
GROUNDWATER & SOIL
AIR QUALITY
MINISTRY OF PRIMARY INDUSTRIES

HAWKE'S BAY | Environmental Science
REGIONAL COUNCIL

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May 2017

Analogous to Team NZ efforts in the fourth semi-final race, autumn bolted to a premature end in May when we face planted into winter. The result, we ended up wetter and colder than anticipated. For me, May was struggle street or more precisely struggle sheet – too often getting into bed with sheets of doubtful dryness, that were taken from the line with more optimism than common sense. May rainfall was above normal across the region and temperatures below average. River and soil moisture levels were more than solid and even groundwater stocks caught up. We're winners to date in our tussle with poor air quality but hey, it's early days and we're only through the prelim round.

Kathleen Kozyniak, Principal Scientist Climate and Air



Lake Tutira on a late May day.

The short summary

Early winter – wet and cold

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

Data and images provided by HBRC.

June to August Forecast

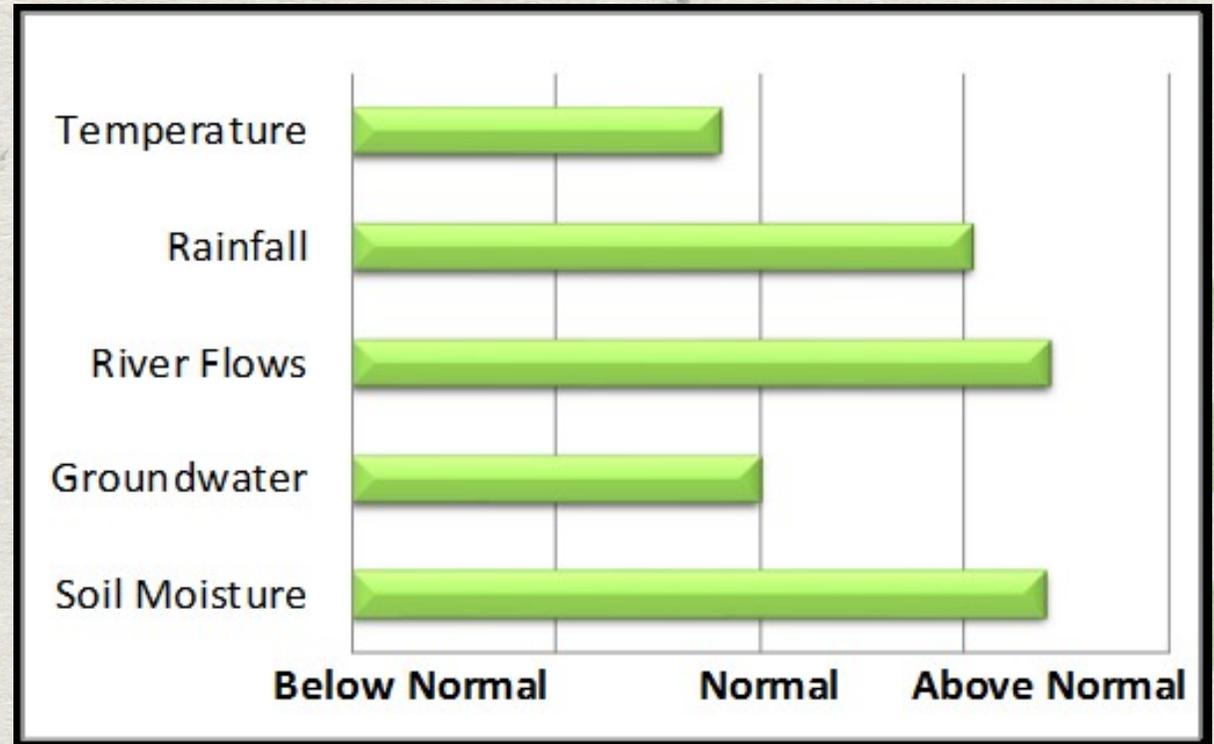
Temperature	Near or above average
Rain	Near normal
River flows	Near normal
Soil moisture	Near normal

(source : NIWA)

Longer Forecast:

El Nino-Southern Oscillation (ENSO) remains in neutral mode. The prospects of an El Nino developing during winter and spring are less convincing than earlier indications but it's still possible and more likely to be a weak event than strong.

Anticyclones are rooted over southern Australia to start winter and fronts moving round the flanks of those highs are sending us spates of showery southerlies. Looking further ahead, weather models favour a west to southwest flow over the country for most of winter with both temperatures and rainfall around normal



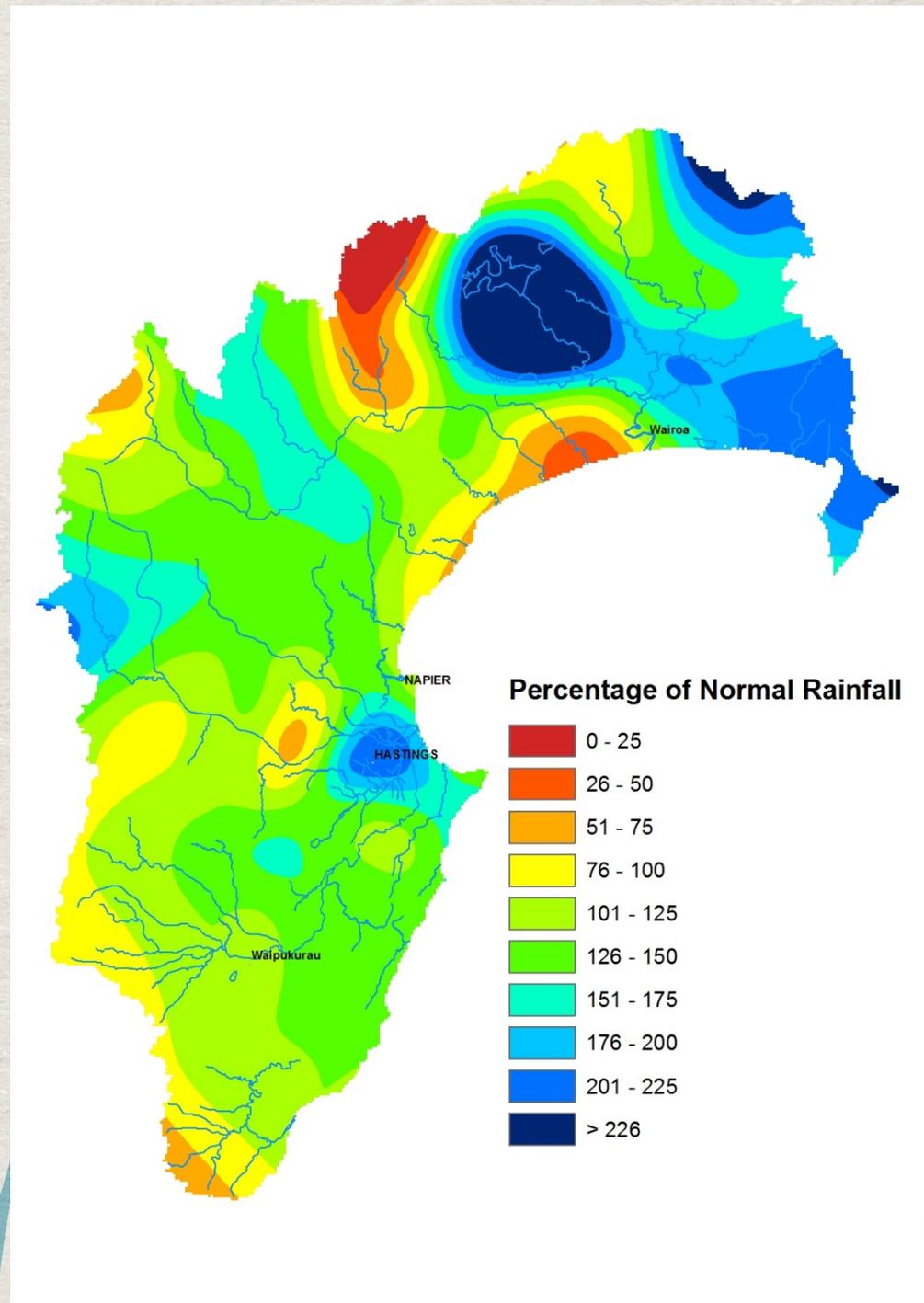
RAINFALL

Above normal...again

Percentage of normal May rainfall
(30 year average)

For areas in the region:

Waikaremoana	213%
Northern HB	169%
Tangoio	135%
Kaweka	145%
Ruahine	98%
Heretaunga Plains	137%
Ruataniwha Plains	123%
Southern HB	118%
Hawke's Bay Region	142%



TEMPERATURES

A bit dismal, below normal

Mean Difference from Normal

Maximum Temperature: -0.5°C

Minimum Temperature: -0.2°C

Mean Daily Maximum: 15°C

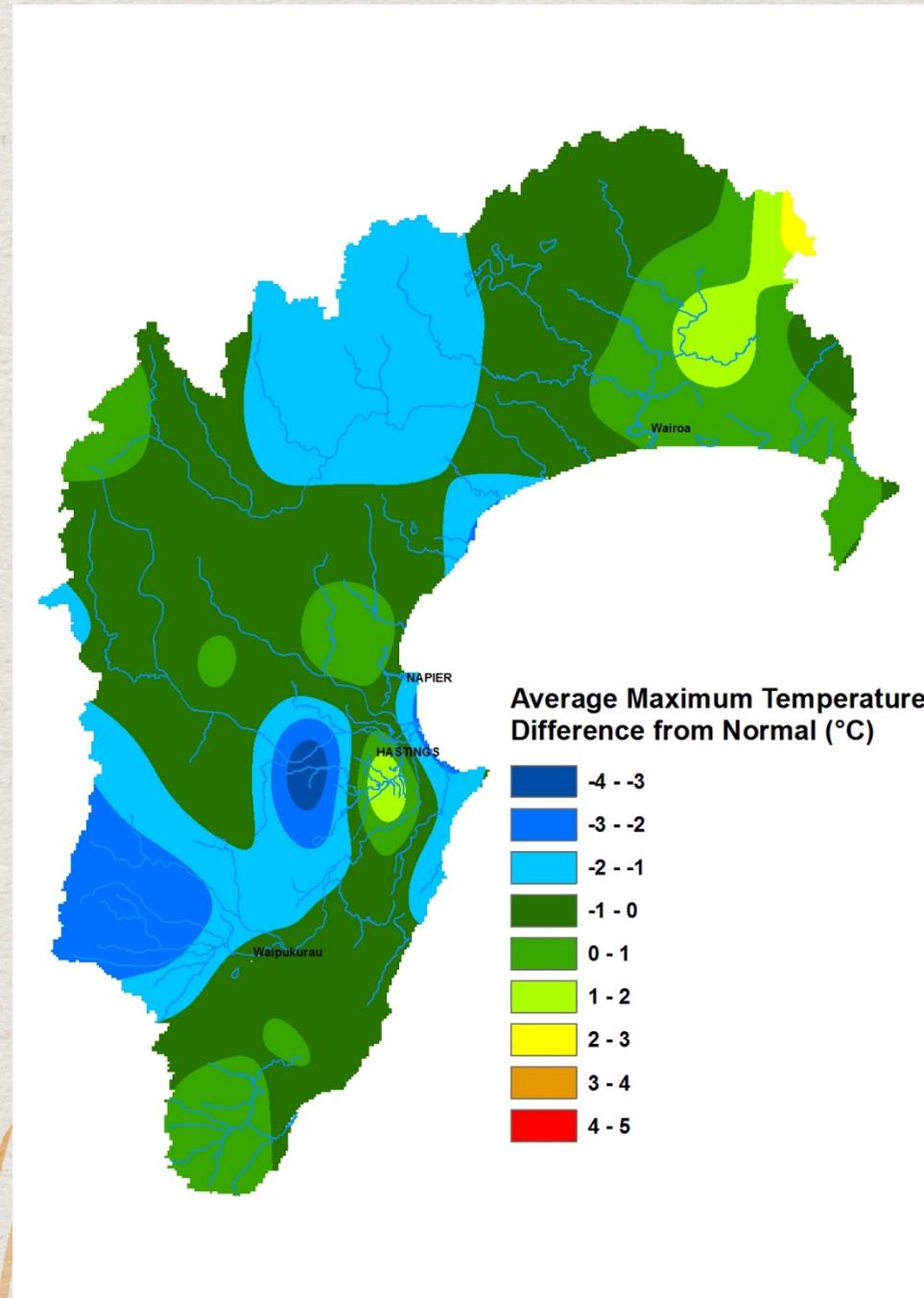
Mean Daily Minimum: 6°C

Highest Daily: 22.8°C

Location: Wairoa North Clyde EWS

Lowest Daily: -3.9°C

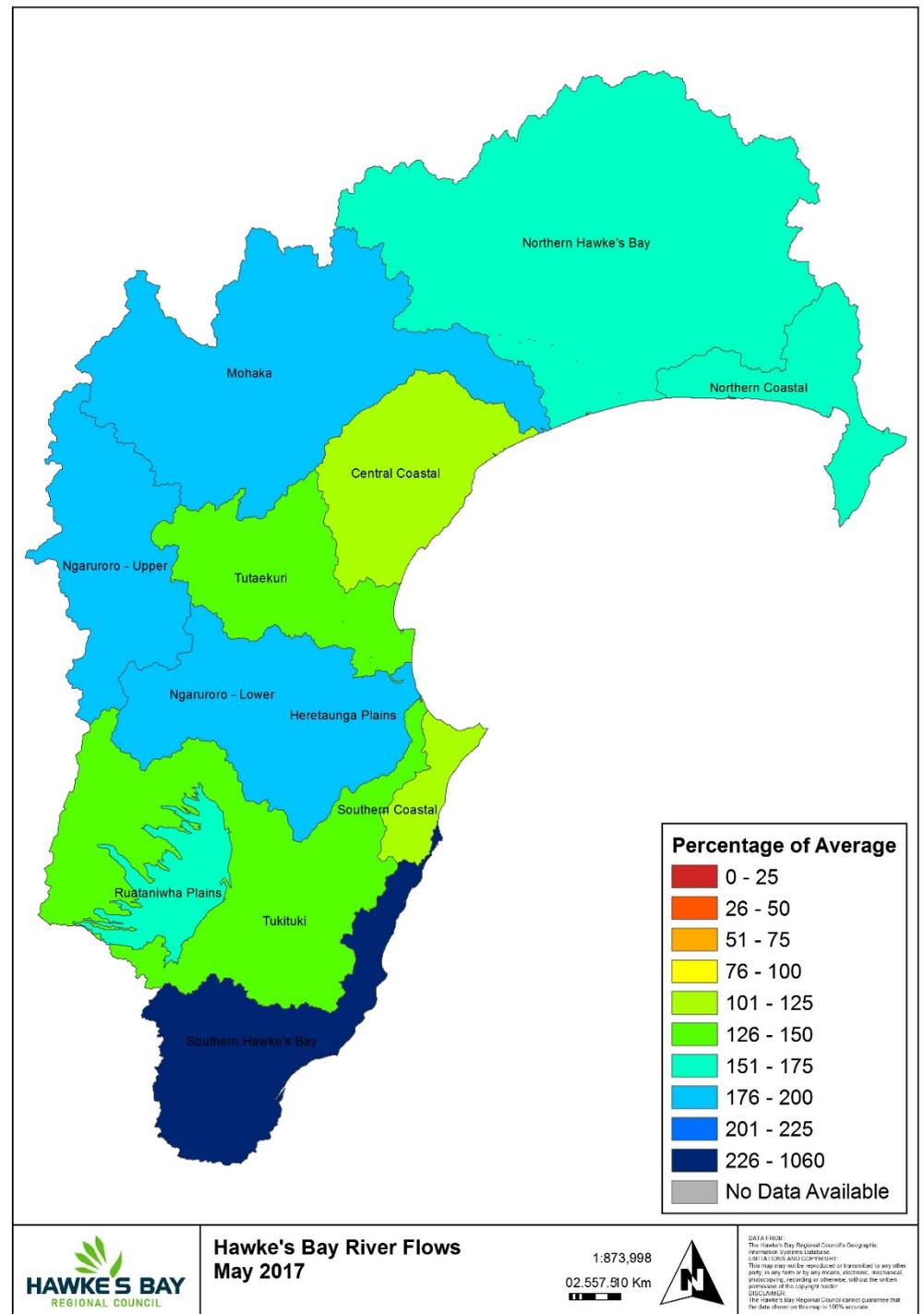
Location: Taharua



RIVER FLOW

Percentage of average May flows for areas in the region:

Northern Coastal	166%
Northern HB – Hangaroa River	134%
Northern HB – Wairoa River	195%
Northern HB – Waiau River	203%
Mohaka	187%
Central Coastal	121%
Tūtaekuri	146%
Heretaunga Plains	NA
Ngaruroro - Upper	193%
Ngaruroro - Lower	195%
Southern Coastal	114%
Ruataniwha Plains	171%
Tukituki	136%
Southern HB	269%
Hawke's Bay Region	172%



GROUNDWATER & SOIL MOISTURE

Groundwater:

Heretaunga basin –

Mainly normal above normal water levels

Ruataniwha basin –

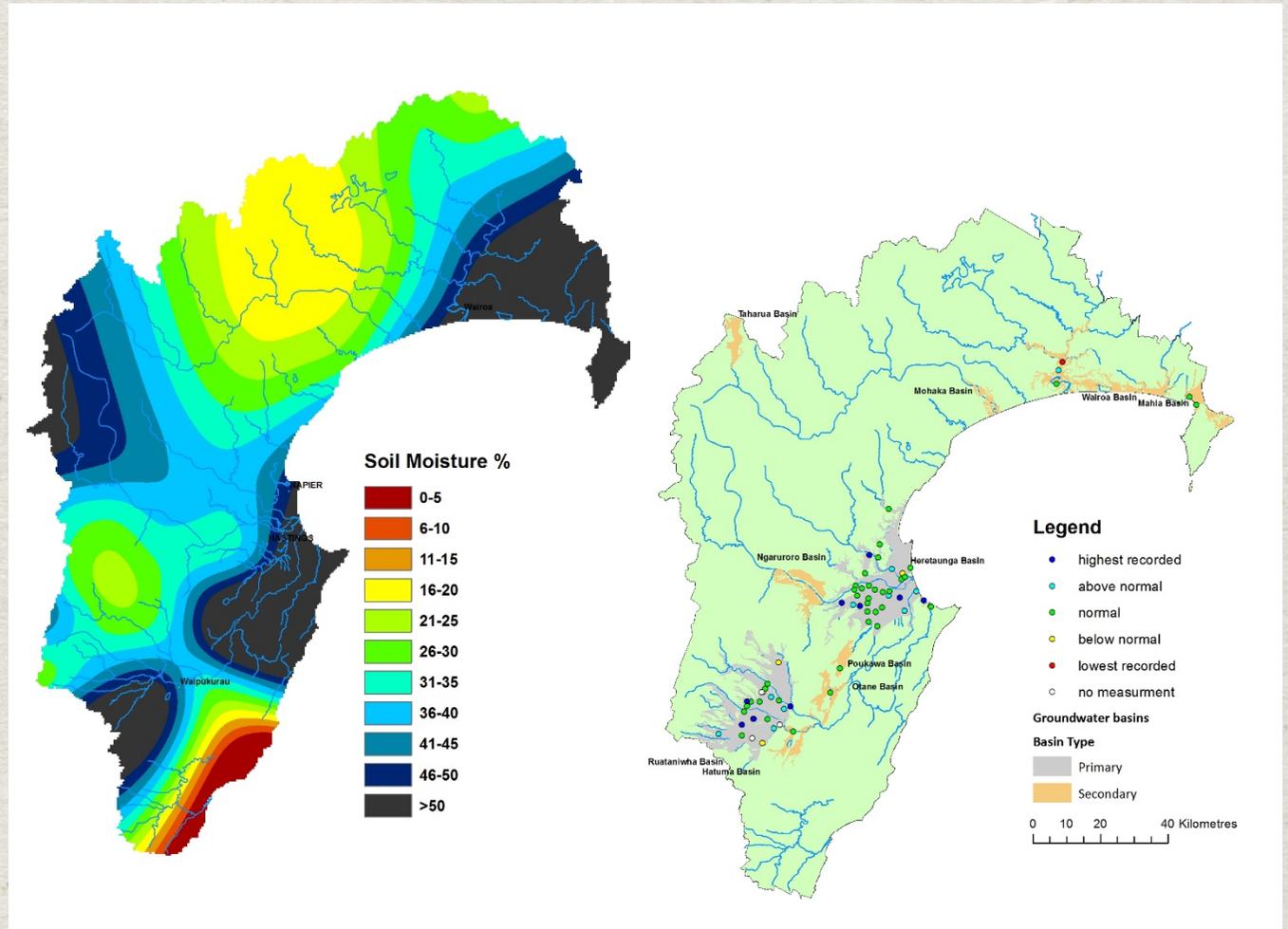
Mainly normal and above normal water levels

Secondary basin –

Mainly normal conditions

Soil Moisture

Above normal

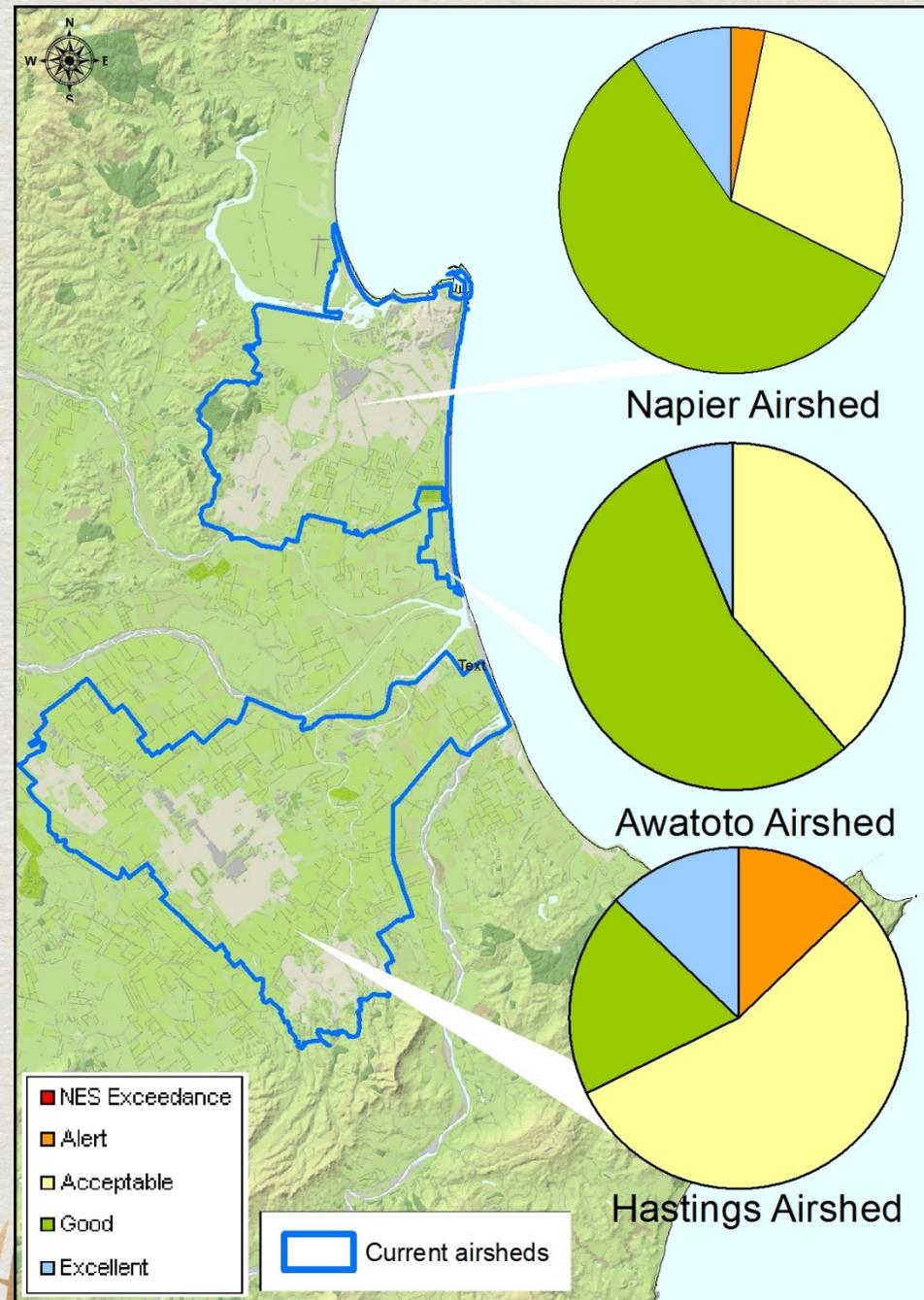


PM₁₀ exceedances:

The National Environmental Standard (NES) for particulate matter (PM₁₀) of 50 micrograms per cubic metre (24 hour average) was not exceeded in the Awatoto, Napier and Hastings airsheds in May 2017.

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.



Fodder crops and pasture covers are very good going into the winter. However, pasture quality is variable and with lower stock numbers it may be a challenge to optimise pastures before spring. Although stock are in very good condition, early sheep pregnancy scanning results have been mixed.

Pasture covers seem to be disappearing quickly with wetter than normal soils causing reduced feed utilisation, and lower temperatures increasing livestock feed demand. Muddy conditions are being exacerbated by stock being moved for scanning. Some activities like shearing and maize harvesting have been held up by the wet conditions.

Dairy cow condition is good and most herds are now dried off till calving. Those supplying winter milk are finding the wet conditions challenging but most are well-set up with feed-pads and in-shed feeding. Autumn pasture growth enabled a lot of late silage to be made.

Milk production for the season in Hawke's Bay was down 10 percent on last year. This was the second year of lower production reflecting steps farmers took to manage in the low payout environment. Production should lift again in 2017/18 based on improving payouts and good cow condition.

Beef, lamb and mutton prices have increased through the autumn and remain at relatively high levels. Fonterra revised its farmgate milk price forecast up to \$6.15 per kilogram of milksolids for 2016/17 and has forecast a milk price of \$6.50 for the coming season. As a result, pastoral farmers are generally optimistic about the year ahead.