

November 2017

# Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

TEMPERATURES

RAINFALL

RIVER FLOW

GROUNDWATER & SOIL

RECREATIONAL WATER QUALITY

**HAWKE'S BAY** | Environmental Science  
REGIONAL COUNCIL

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REGIONAL COUNCIL

## **November 2017**

November's rainfall snuck into the near normal range but, like the other two months of spring, it's a story of the haves and have-nots. In September northern areas had it and the south didn't. In October, the south had it and the north didn't. In November, inland areas had it (with thunderstorms to boot –see our new lightning map) and the coast didn't. All eyes on next month to see if the coast gets it and inland areas luck out. Do the sums over the three months and the only part of the region not to get a fair shake was the south coast. It follows that soil moisture levels there look dry while elsewhere they're okay. Groundwater levels seem all good and only a few rivers benefited from heavy, thundery showers in the headwaters. The downpours made water quality temporarily dicey in some of our swimming spots, while temperatures through the month weren't madly worth bothering your togs.

**Kathleen Kozyniak**

**Principal Scientist Climate and Air**

## Longer Forecast

Summer is set to feature a weak La Niña, which increases the chances that rainfall during the season won't be below average. The overall pattern is one of higher pressures over most of the country but highest over the very south. The result is an easterly flow over Hawke's Bay. It can mean long spells of fine, dry weather but it also carries the chance of a sprinkling from something tropical in nature. A few lows tried forming to the north of us throughout November but were outmuscled by the anticyclone. Overall it seems near normal rainfall is the want of the weather models for the summer, possibly wetter the further north you go in the region, and it may come in the form of long dry spells interspersed by a reasonable dollop.



### The short summary

Patchy rain, temperatures okay.

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

### December to February Forecast

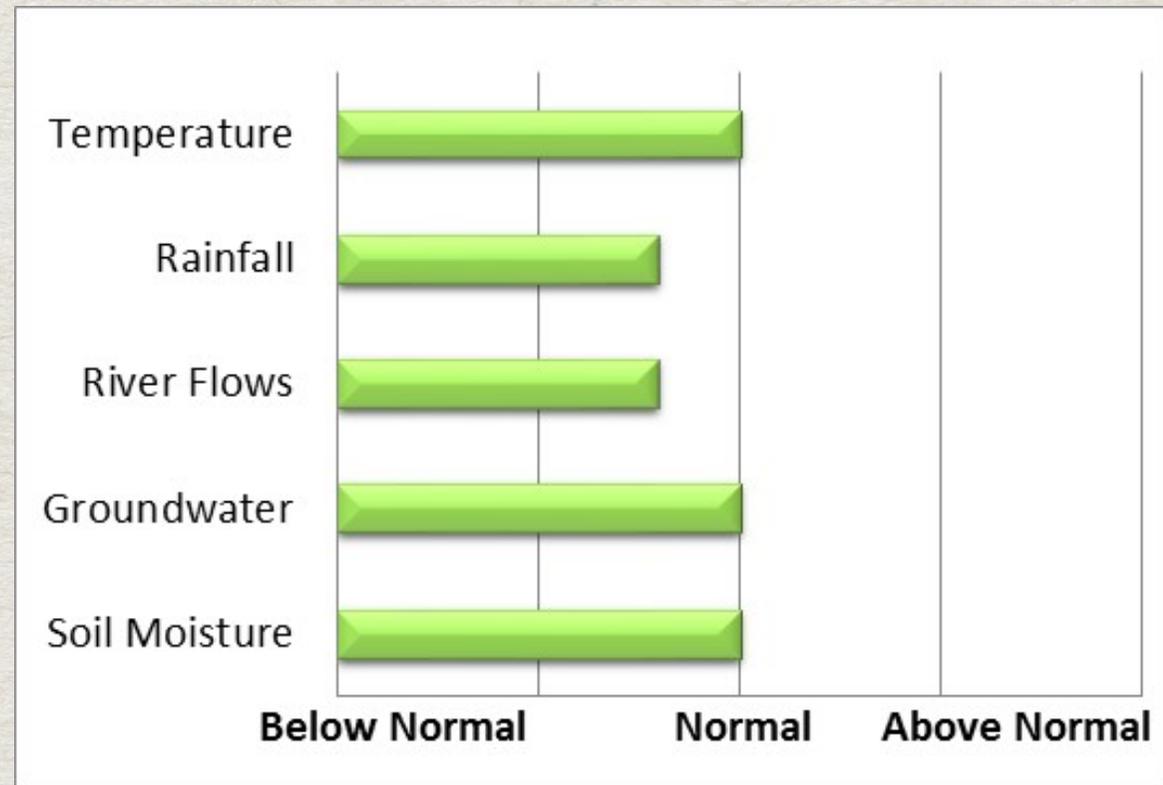
Temperature	Above average
Rain	Near or above normal
River flows	Near or above normal
Soil moisture	Near or above normal

(source : NIWA)

For more information

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

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# RAINFALL & LIGHTNING

Rainfall – dry at the coast, wet inland

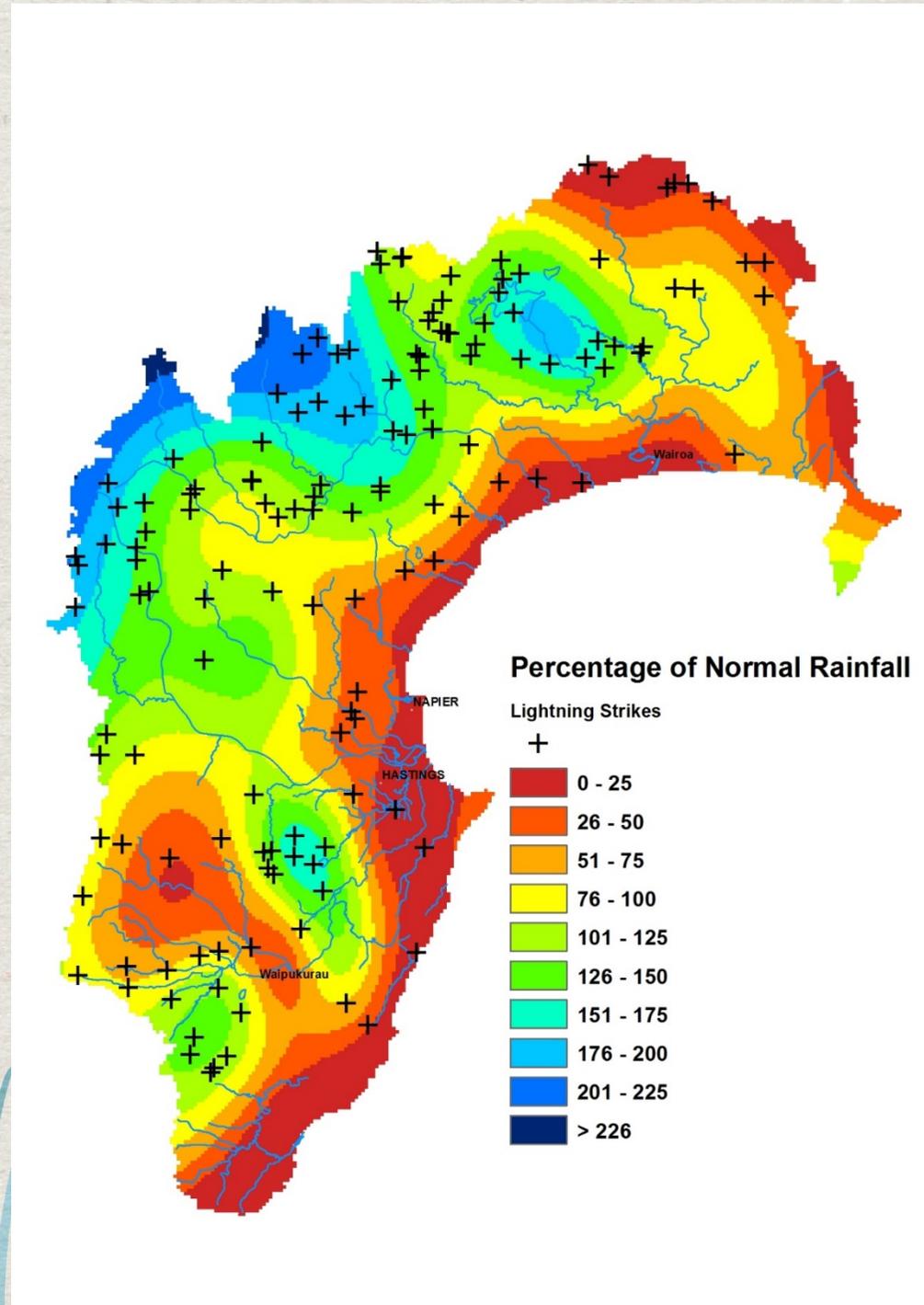
Lightning strikes (cloud to ground) – 144

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

Percentage of normal November rainfall  
(30 year average)

**For areas in the region:**

Waikaremoana	120%
Northern HB	68%
Tangoio	88%
Kaweka	126%
Ruahine	73%
Heretaunga Plains	73%
Ruataniwha Plains	65%
Southern HB	25%
<b>Hawke's Bay Region</b>	<b>80%</b>



# TEMPERATURES

Temperatures – typical daytime temperatures, warm nights

## Mean Difference from Normal

Maximum Temperature:  $-0.3^{\circ}\text{C}$

Minimum Temperature:  $0.8^{\circ}\text{C}$

Mean Daily Maximum:  $18^{\circ}\text{C}$

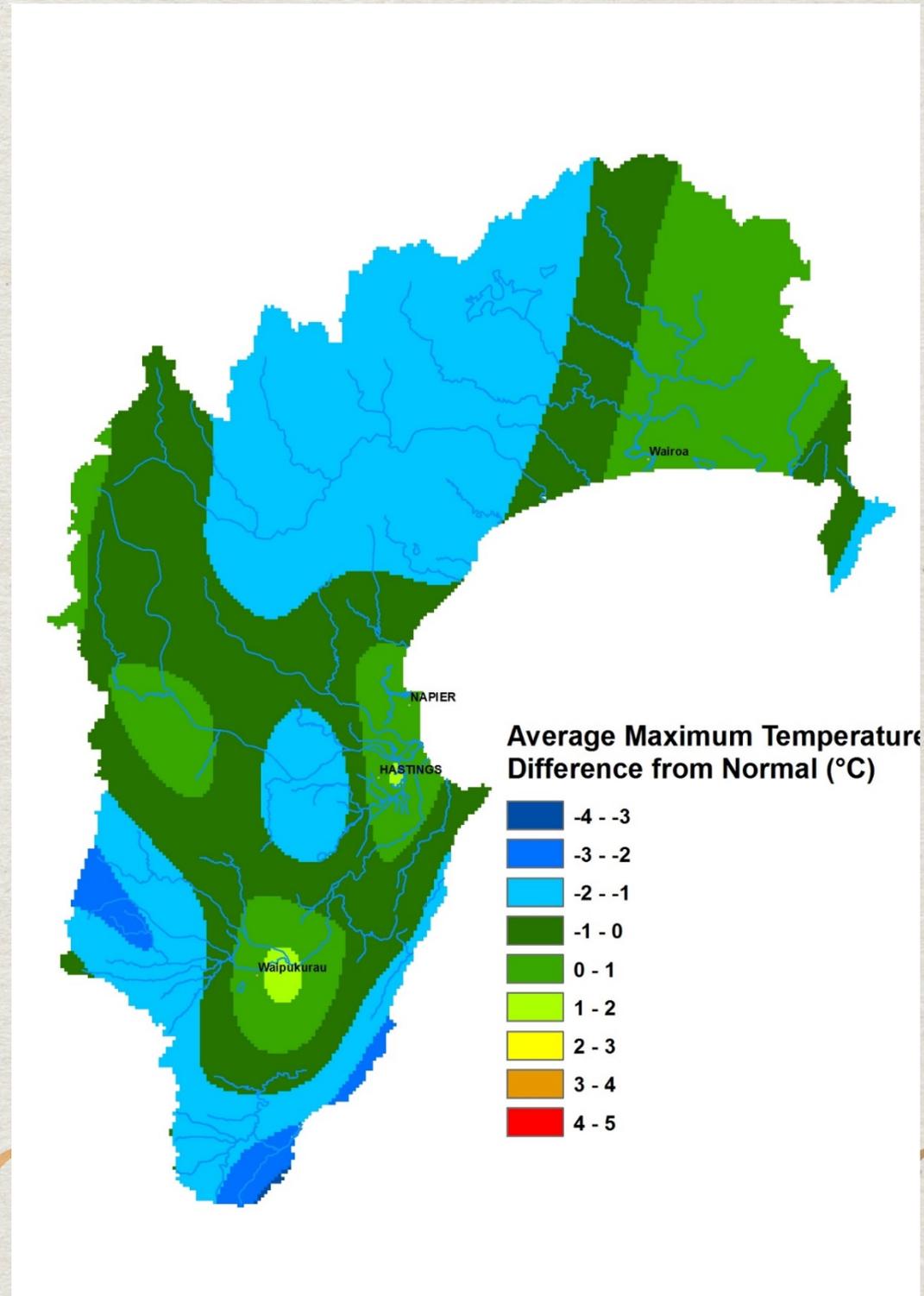
Mean Daily Minimum:  $10^{\circ}\text{C}$

Highest Daily:  $28.2^{\circ}\text{C}$

Location: Napier Aero AWS

Lowest Daily:  $-0.6^{\circ}\text{C}$

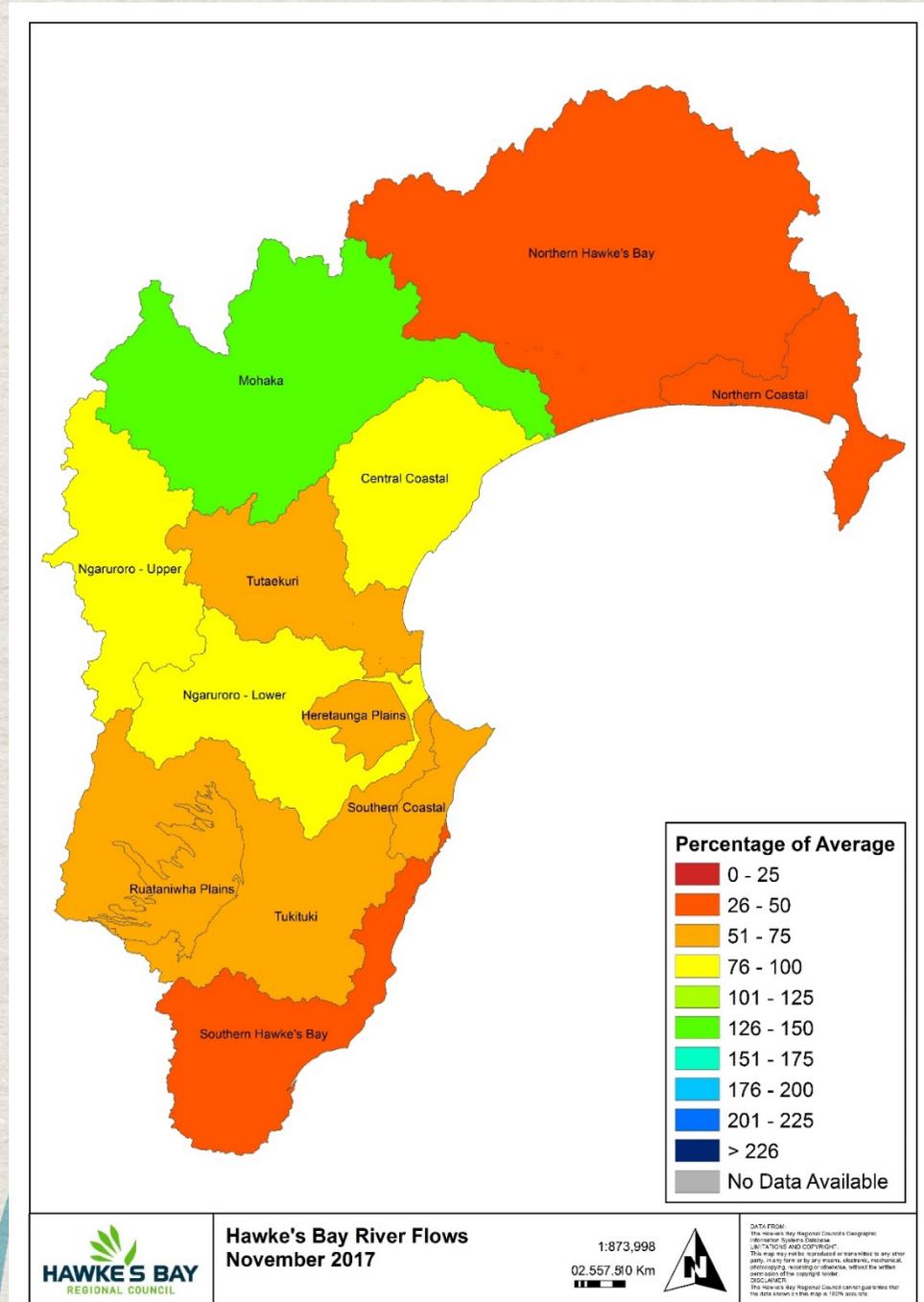
Location: Taharua



# RIVER FLOW

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

Northern Coastal	38%
Northern HB – Hangaroa River	40%
Northern HB – Wairoa River	50%
Northern HB – Waiau River	85%
Mohaka	137%
Central Coastal	89%
Tūtaekuri	69%
Heretaunga Plains	70%
Ngaruroro - Upper	81%
Ngaruroro - Lower	87%
Southern Coastal	71%
Ruataniwha Plains	59%
Tukituki	65%
Southern HB	44%
<b>Hawke's Bay Region</b>	<b>70%</b>



# GROUNDWATER & SOIL MOISTURE

## Groundwater:

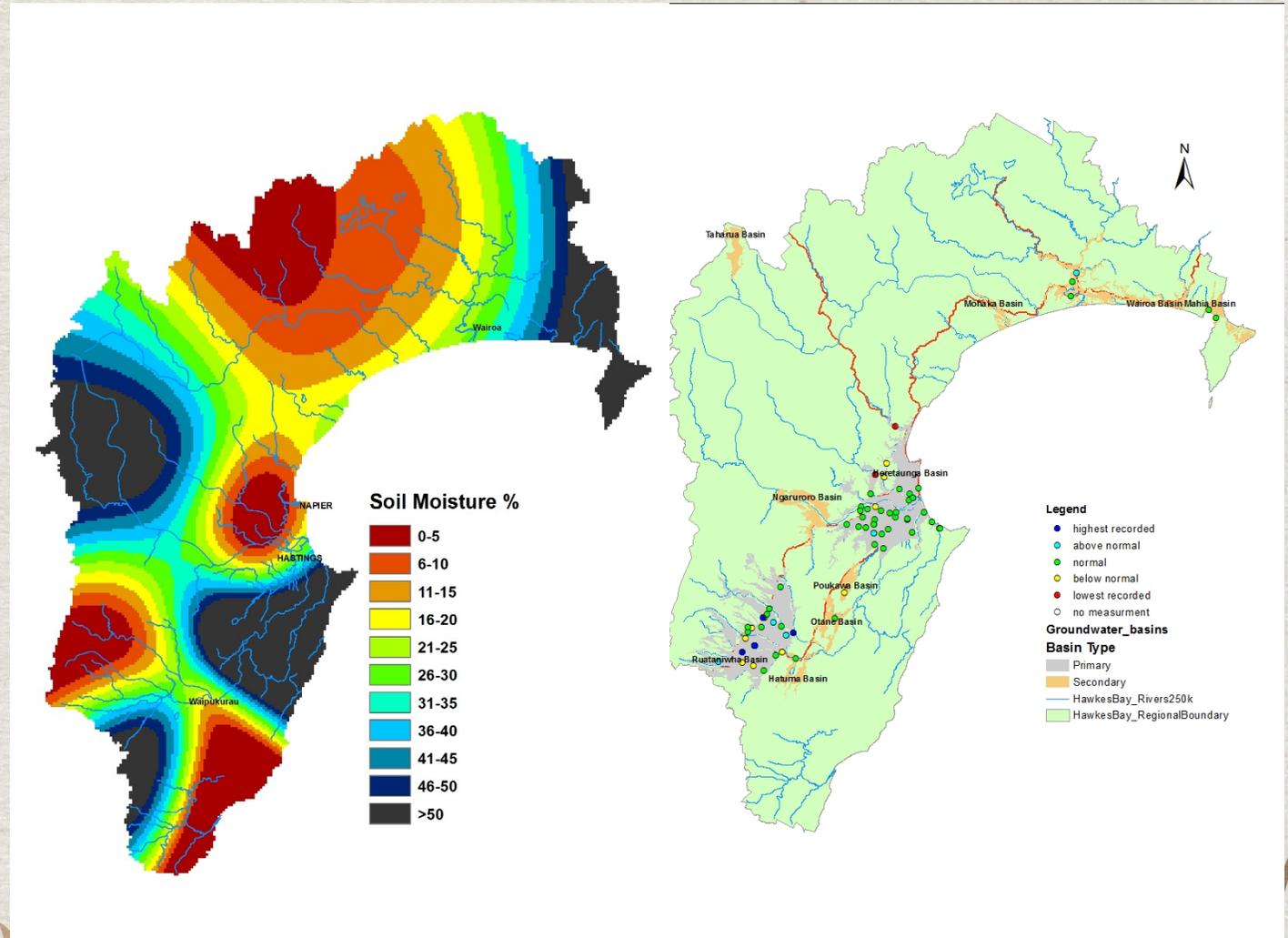
**Heretaunga basin** – Mainly normal water levels

**Ruataniwha basin** – Mostly normal and above normal levels, some below normal

**Secondary basin** – Mainly normal water level conditions

## Soil Moisture

Soil moisture – Mostly normal but dry on the south coast



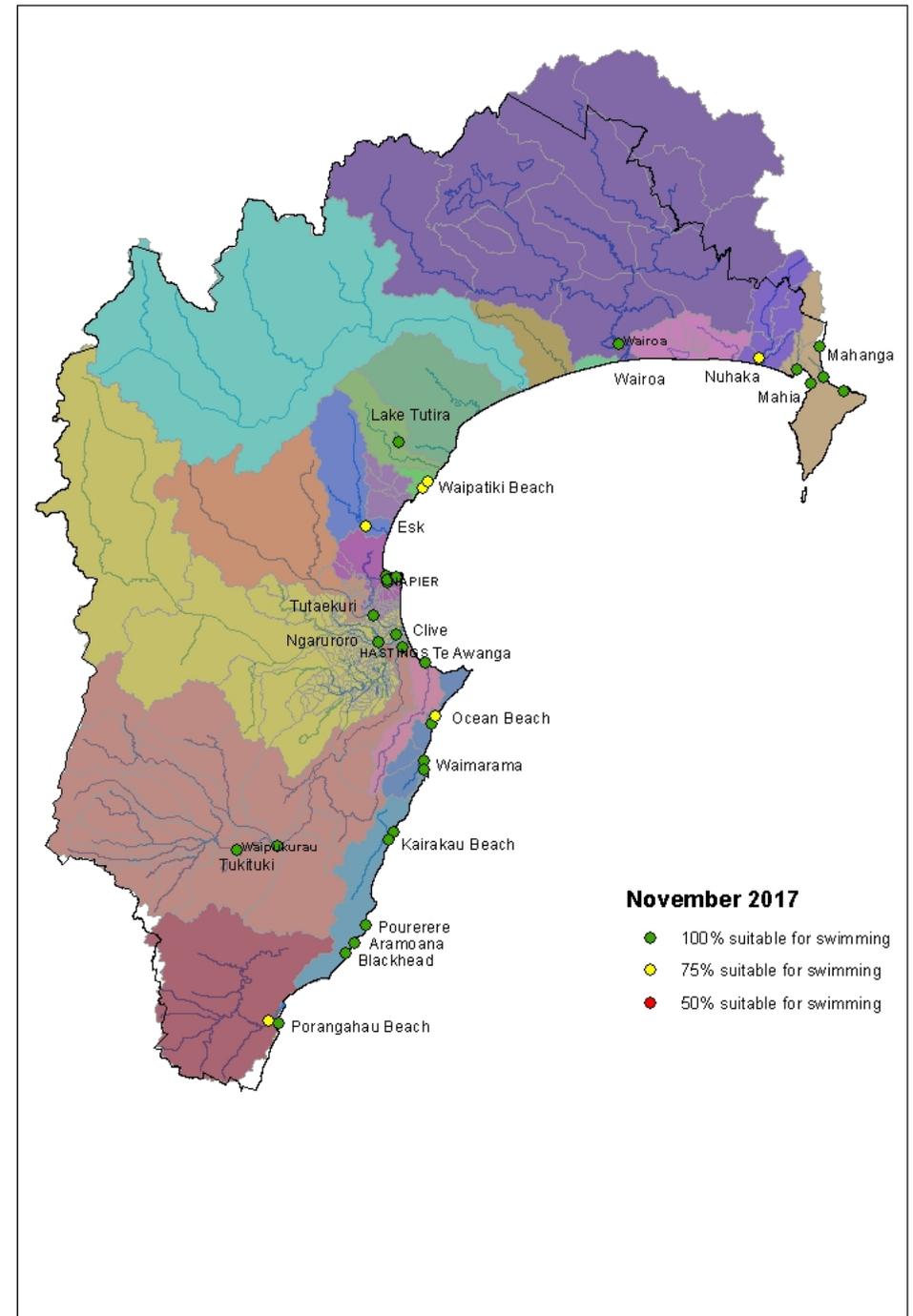
## RECREATIONAL WATER QUALITY

The recreational water quality monitoring season has kicked off with a month of mostly good water quality at our popular swimming sites.

Early in the month there were exceedances at both Porangahau Estuary and Waipatiki Beach. These were not related to rainfall, and resamples the following day showed acceptable swimming conditions.

After rainfall in week three there were exceedances at Waipatiki Lagoon, Waipuka Stream, Esk River and Nuhaka River. Rainfall events create surface water runoff and allows contaminants from land to enter waterways.

Please note this year some sites are sampled fortnightly – please see the website for more details.



## November 2017

Dry, settled weather has seen parts of the region start to dry out, particularly in the south east. Some localised inland areas benefited from recent thunderstorms and newly sown crops in particular, got much needed rain. Although the lack of north-westerly winds has helped by not worsening the situation, later sown fodder and squash crops are struggling without irrigation or rain showers.

There is plenty of feed about, with hay and baleage being made in many parts of the region. However, pasture quality has declined over the month and pasture levels fall as you move from the western ranges to the south-east coast.

Some farms weaned their lambs earlier than usual, to prioritise them onto better pasture and take advantage of high prices for cull ewes.

Relative to rest of the country, Hawke's Bay dairy farmers have had a great spring with production up 5 percent on last year. Like most pastoral areas they are looking for rain now, especially on crops.

Rain in the western ranges has helped replenish river levels, supporting irrigation takes.

Fruit growers are having a good season with the dry conditions reducing disease pressure. The summerfruit season is about a week ahead of last year with good crops expected as Christmas approaches.