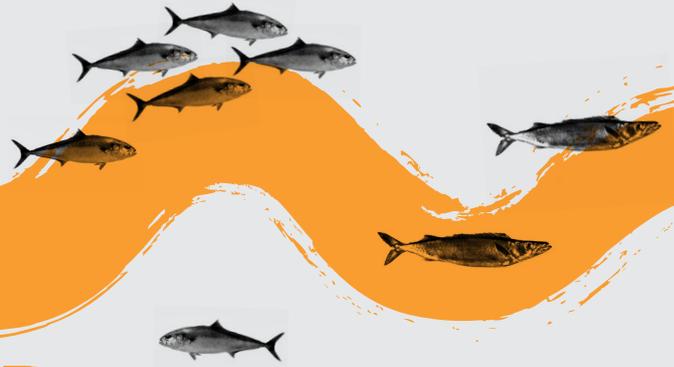




WAIRARAPA COAST

GREATER WELLINGTON
REGIONAL COUNCIL
ENVIRONMENT REPORT CARDS
2016/17

RAINFALL AND WATER LEVELS



greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao



Why do we monitor rainfall and water levels?

Gathering information on rainfall and water levels in the region's rivers, lakes and aquifers is essential so that we can:

- Develop sound water management policies, including determining how much water can safely be taken from a water body
- Detect changes and trends, and whether these can be related to such things as climate change
- Provide information during Civil Defence emergencies such as floods or periods of drought.

What did the 2016/17 data show?

Unlike the western part of the region which experienced a very wet first six months, the Wairarapa Coast was drier than normal (despite a wet November 2016). This pattern is due to a number of north-westerly weather systems which brought rain to the region, with much of it falling on the western side and lesser amounts making it over the ranges to the Wairarapa.

Another way to consider the weather is to look at the number of "rain days". All other parts of the region had more than the average number of rain days in the first part of the year. However the coast experienced only 70 rain days in winter/early spring 2016 compared to the long-term average of 86.

Overall the second half of the year was wetter than normal. April 2017 was exceptionally wet, receiving nearly three times the normal amount of rainfall.

The Pahaoa River started the year with very low flows – following on from the previous summer and autumn which was very dry. The trend for the year was for largely below-average river flows interspersed by significant peaks during three individual wet months (November 2016, February 2017 and April 2017). Flows in November and April flows were exceptionally high – nearly five times higher than normal!

It was also a very windy summer at Castlepoint with severe gales occurring every month from November 2016 through to April 2017.



Did you know...

We've been monitoring rainfall at Tanawa Hut since 1955!

On the Wairarapa Coast we monitor:



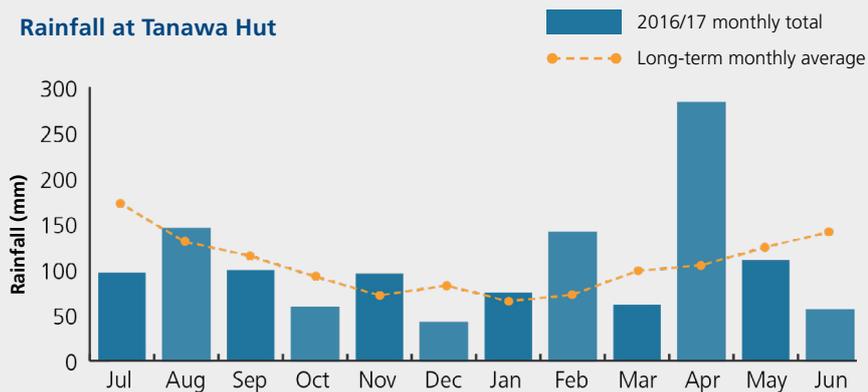
Rainfall
at 2 sites



River levels
at 1 site

Highlights from the 2016/17 data

Rainfall at Tanawa Hut



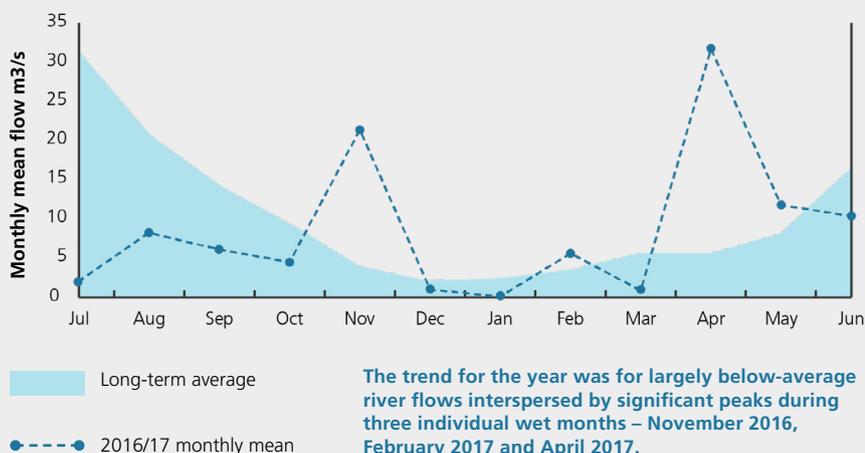
On average the Wairarapa Coast was drier than normal in the first half of the year and wetter than normal in the second half of the year.



Did you know...

A severe gale is defined as having an average wind speed of 90km/hr or frequent wind gusts greater than 110km/hr?

Flow in the Pahaoa River



The trend for the year was for largely below-average river flows interspersed by significant peaks during three individual wet months – November 2016, February 2017 and April 2017.

Peak wind gust speeds in Castlepoint:

148km/hr
December 2016 and February 2017

145km/hr
November 2016

143km/hr
January 2017

137km/hr
March 2017

117km/hr
April 2017



Constant wind can not only be irritating, it also dries out soil. The particularly warm weather combined with the incessant wind made life difficult for farmers on the Wairarapa Coast during the 2016/17 summer.

Photo credit: Stephen Russell
www.stuff.co.nz/business/farming/89013976/incessant-wind-driving-wairarapa-farmers-crazy

For further information:

Full details of the 2016/17 monitoring results can be found in our Hydrology Annual Data Report published online at www.gw.govt.nz/Annual-monitoring-reports

To view or download environmental monitoring data go to <http://graphs.gw.govt.nz>