

Hydrology information for the situation report – 17 April 2020

Current situation summary:

Northland has received the same pattern of scattered showers over the last week that we have seen in previous weeks, with some areas receiving little (10-20mm), others a moderate amount and rainfall concentrated around Kaeo, the upper Awanui Catchment and the Tutamoe/Parataiko Ranges (30-60mm). It was nice to see some rainfall extend to the Bay of Islands, albeit not a large amount.

Most rivers recorded a small rise with the rainfall but recede quickly after. 75% of rivers remain below drought flows.

Showers continue from the 16th to 21st and more than likely beyond this. With these continuing showers we will hopefully see rivers begin to creep out of drought flow levels.

MetService Outlook

Short term: 3-5 days:

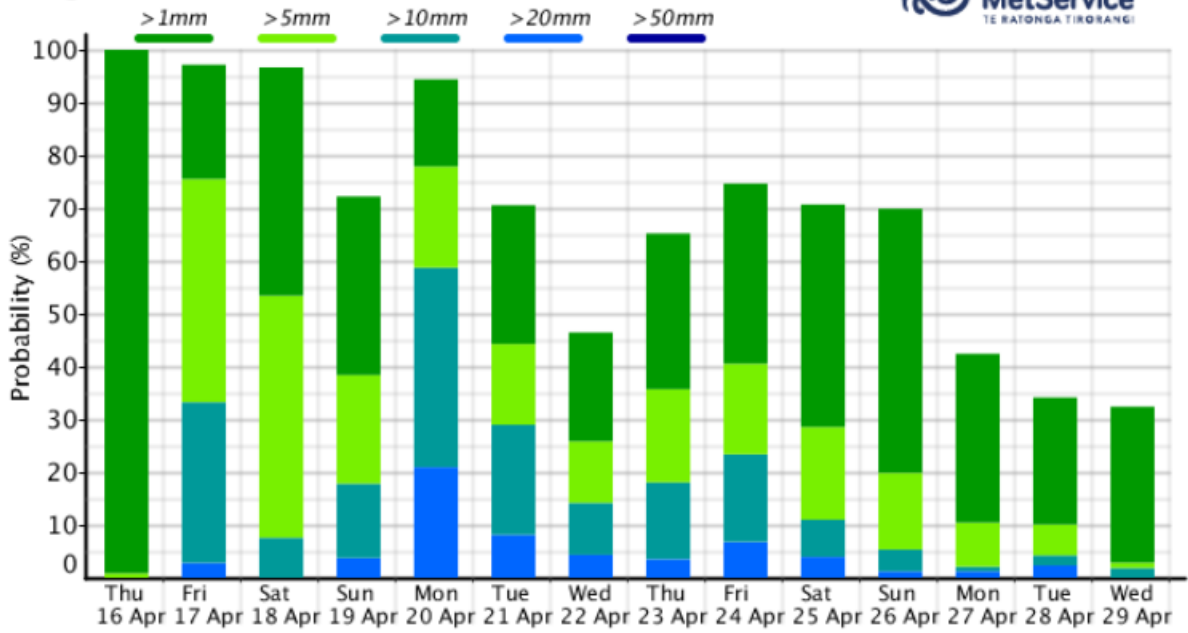
- Westerly / north-westerly wind and periods of showers from the 16th to 21st.

Long range:

From MetService verbatim

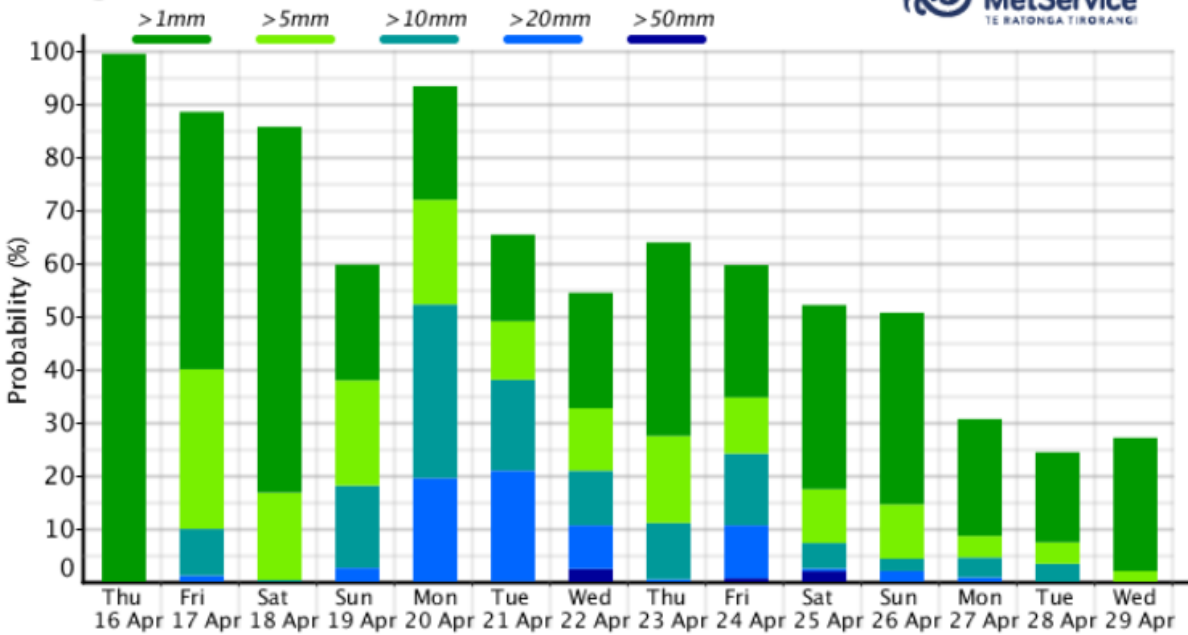
- 16th -19th April: ... cold and showery southwest winds.
- 20th -26th April: signs of a Tasman Low bringing widespread rain – this development remains very uncertain. Unlikely to be as cold as signalled
- 27th April to 3rd May: high pressure returning to the northern Tasman Sea with cool southwesterlies the default setting.
- 4th - 10th May: continued high pressure in the northern Tasman Sea is predicted, with cooler southwesterlies signalled across Northland.

Dargaville Rain Probabilities



Generated at: 16 Apr 13:00

Whangarei Rain Probabilities



Generated at: 16 Apr 13:00

Midday to Midday NZ Time	Week One	Week Two	Week Three	Week Four
From:	13/04/2020	20/04/2020	27/04/2020	4/05/2020
To:	19/04/2020	26/04/2020	3/05/2020	10/05/2020

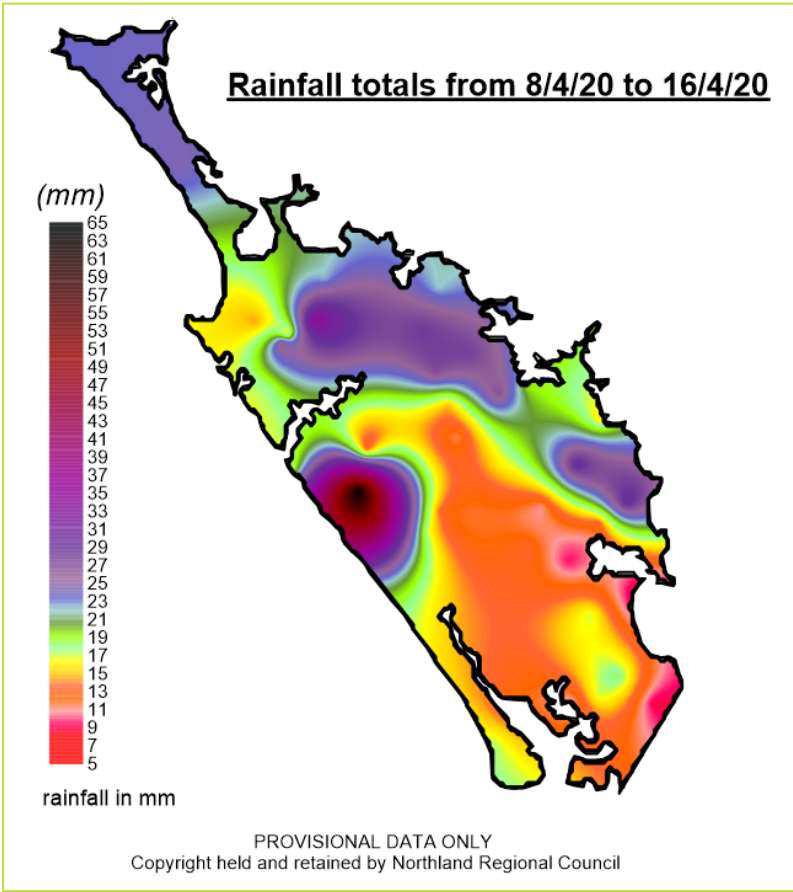
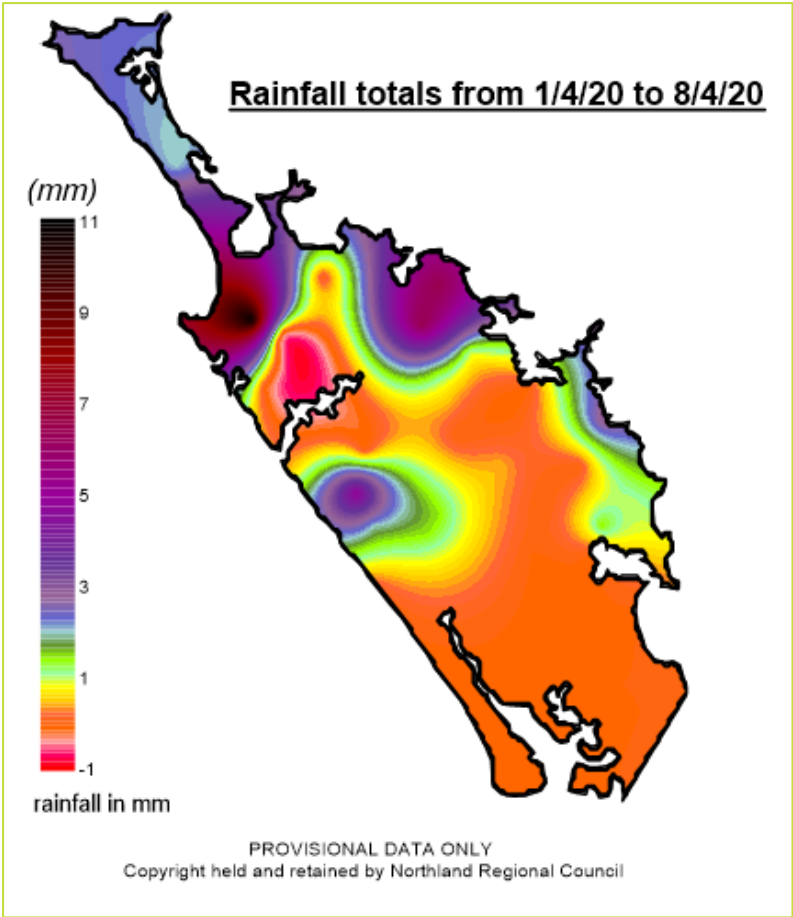
Temperature anomaly Deg C	Week 1	Week 2	Week 3	Week 4
Kaitaia	1.0	-0.1	-0.5	-0.5
Kaikohe	0.7	-0.2	-0.5	-0.6
Whangarei	0.6	-0.3	-0.5	-0.6
Dargaville	0.6	-0.3	-0.5	-0.7

Rainfall anomaly (mm)	Week 1	Week 2	Week 3	Week 4
Kaitaia	3	10	-7	-2
Kaikohe	3	11	-7	-3
Whangarei	-2	9	-7	-3
Dargaville	10	11	-6	-2

Rainfall (% anomaly)	Week 1	Week 2	Week 3	Week 4
Kaitaia	10%	31%	-22%	-7%
Kaikohe	9%	31%	-19%	-8%
Whangarei	-7%	35%	-29%	-10%
Dargaville	38%	42%	-23%	-7%

Rainfall

From the 8th to 16th rainfall has once again been quite variable geographically. The usual hotspots of Kaeo, upper Awanui Catchment, Eastern Hills and Tutamoe/Parataiko Ranges received moderate rainfall of between 30-60mm. The rest of the region received less with around 10-20mm.



Top 3 highest rainfall totals in each district for 8/4/20 to 16/4/20. Rainfall totals for the centres shown below.

FNDC		WDC		KDC	
Mangakawakawa	34.5 mm	Ngunguru	30.0 mm	Waimamaku	64.0 mm
Kaeo	28.5 mm	Whakapara	30.0 mm	Waima	47.0 mm
Kerikeri Golf Club	28 mm	Brynderwyn	18.5 mm	Hakaru	23.5 mm
CENTRES					
Kaitiāia	8.0 mm	Whangārei	10.6 mm	Dargaville	20.6 mm
Kaikohe (Ohaeawai used)	15.0 mm				
Kerikeri	23.0 mm				

River flows

Recent rainfall as slightly elevated flows slightly in most rivers, but most of these still remain below drought flows (75% are below DMF). Rivers continue to recede quickly after rainfall indicated dry catchment conditions continue overall. With the continuation of showers in the forecast over the next week, these rivers will be up and down but hopefully begin to show overall trends of increasing flows as we creep out of drought with these unremarkable rainfall events.

Public water supply river flows (litres per second: l/s) as of 12pm 08 April 2020					
FNDC		WDC		KDC	
Awanui	436	Hatea	77	Kaihu	714
Wairoro	~ 3 D/S	Ruakaka	17		
Waitangi	655	Ahuroa	80		
Puketotara	118				
Petaka	0.34				

Groundwater levels

No new information

Soil moisture deficits

Soil moisture levels are still a lot drier than normal for this time of year, as seen in the soil anomaly map.

Soil moisture anomaly (mm) at 9am on 15/04/2020

