

Hydrology information for the situation report – 12 March 2020

Current weather situation

The band of rain from the southwest that moved over Northland on Monday didn't produce a lot of rain (0 – 18 mm) but we can expect some more showers from this evening 12/3/2020 and in the weekend (likely not much and less than 10 mm).

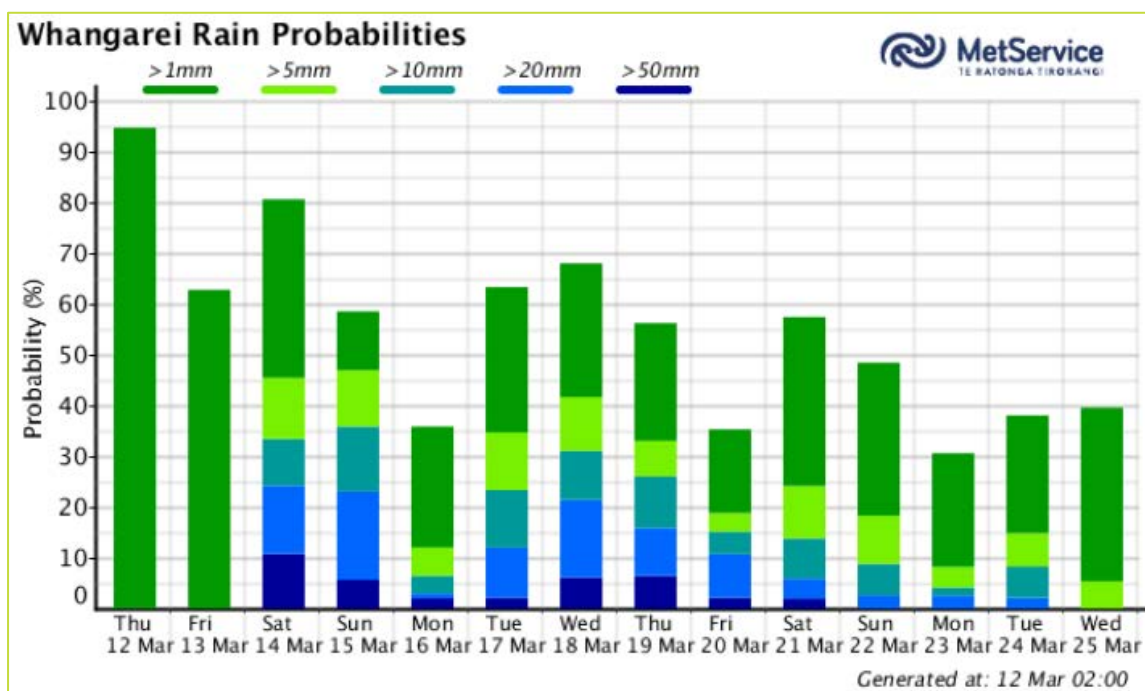
The subtropical low approaching Northland on Monday would produce some heavy rain if the current modelled track is true. Forecasts closer to this time and a MetService update on Monday morning will provide more insight into this.

MetService Outlook

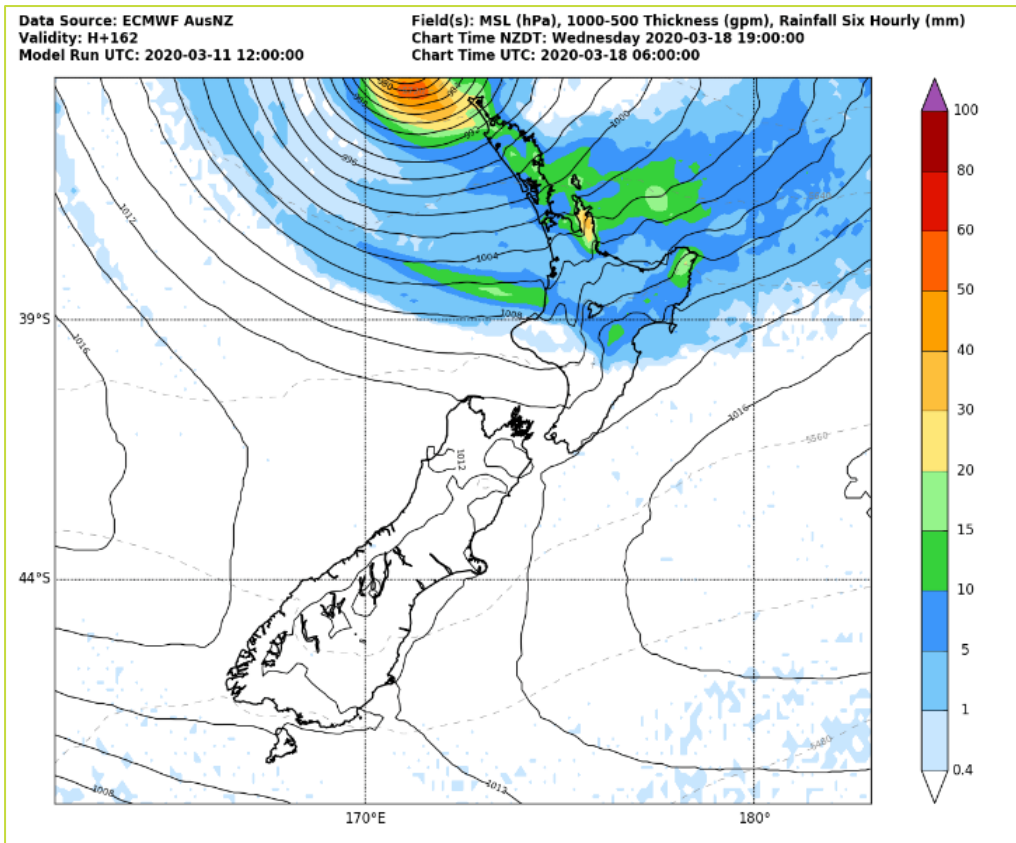
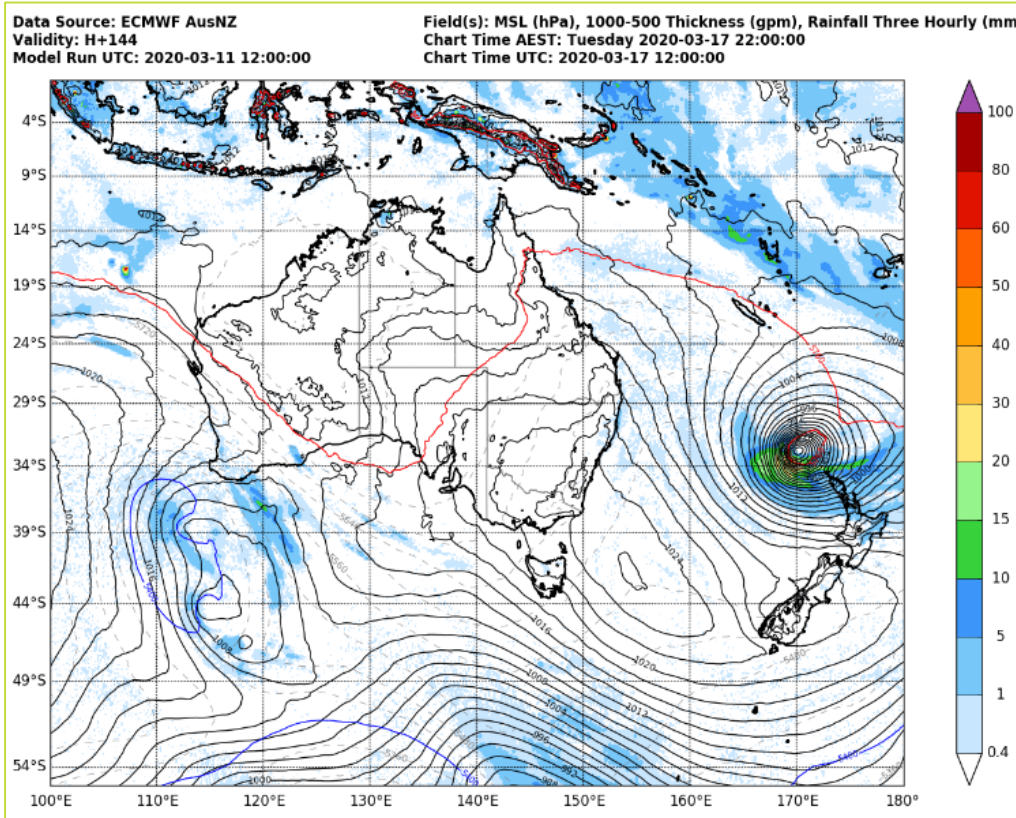
Short term: 3-5 days:

A low-pressure system may approach Northland on Monday which has the potential to bring significant rain. The confidence of the storm track remains low, so updates will be provided as more information becomes available. We will seek advice from MetService on Friday when confidence in the storm track should be higher. See points from MetService below.

- A subtropical low-pressure system should approach Northland from the north Tasman Sea on Monday, bringing rain and strong easterly winds to the north of the North Island.
- There is low confidence of heavy rain in Northland late on Monday. There is also low confidence of severe easterly gales in exposed parts of Northland late on Monday.
- Please note, the position and movement of this low is still uncertain at this stage.



Maps showing potential for a subtropical low approaching Northland on Monday. The direction of the storm track will be updated in later forecasts and may change.



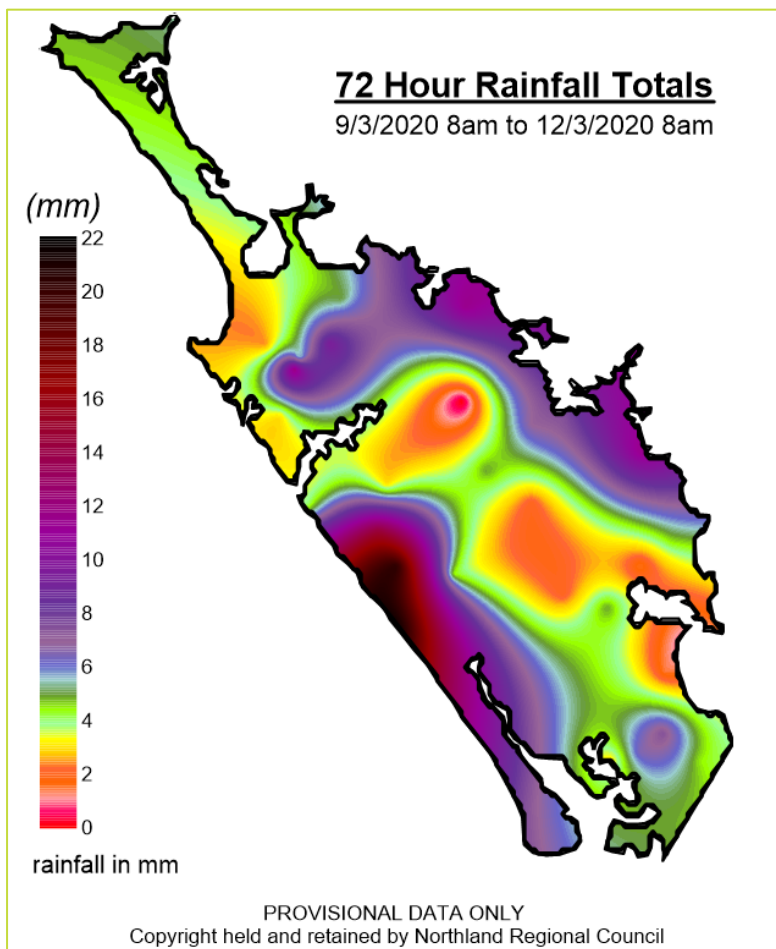
Long range:

Mean Temperature Anomaly Forecasts (in °C)	WEEK ONE Mo 2 - Su 8	WEEK TWO Mo 9 - Su 15	WEEK THREE Mo 16 - Su 22	WEEK FOUR Mo 23 - Su 29	average
Northland	1.8	0.0	0.0	0.3	0.5

Precipitation Anomaly Forecasts (mm)	WEEK ONE Mo 2 - Su 8	WEEK TWO Mo 9 - Su 15	WEEK THREE Mo 16 - Su 22	WEEK FOUR Mo 23 - Su 29	Average
Northland	-1	-1	3	0	0

- There are no further subtropical lows in the current forecast after Monday/Tuesday’s event, but it is promising that more rain producing lows are now moving down from the tropics. There is a possibility that subsequent model runs could predict further lows in the next 10 days.
- A low-pressure system from the Southern Ocean may bring showers and south westerly winds to Northland around the 21st March.
- Previous long-range forecasts predicted next week to be wetter than average.

Rainfall



Some showers in the west and east associated with the south west band moving over Northland on Monday afternoon, with isolated thunderstorms. The Tutamoe Ranges received the most rainfall with 19mm recorded, but most of the region reviewed fairly light showers.

Rainfall accumulation from Friday (09 March 2020) to Monday (12 March 2020). Below are the top three rainfall totals for each district:

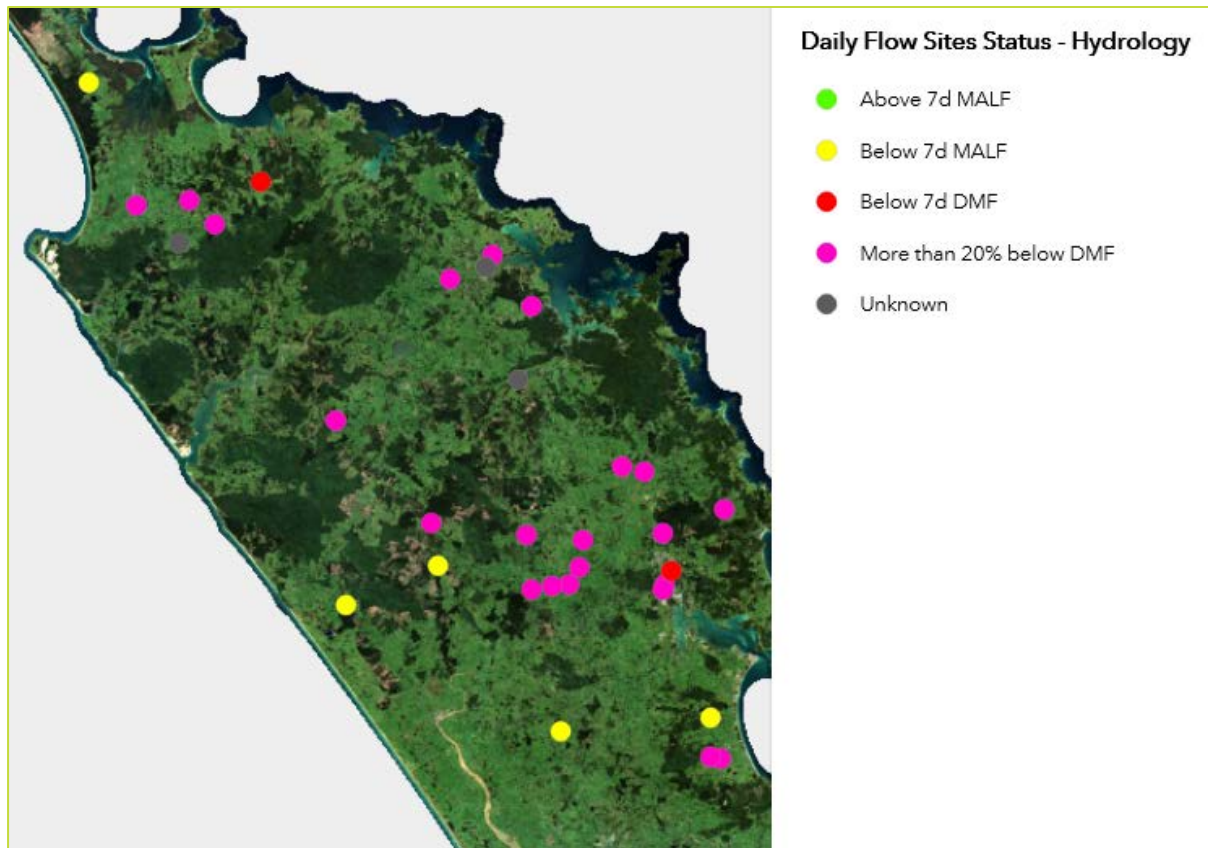
FNDC		WDC		KDC	
Towai	11.5 mm	Oakura	11.5 mm	Tutamoe	19.0 mm
Takahue	11.5 mm	Brynderwyn	7.5 mm	Kai Iwi =	15.5 mm
Mangakawakawa	9.5 mm	Otaika	5.0 mm	Dargaville	12.0
CENTRES					
Kaitiāia	3.4 mm	Whangārei	3.4 mm	Dargaville	12.0 mm
Kaikohe	3.0 mm				
Kerikeri	10.6 mm				

River flows

River flows remain very low throughout most of the region. The Kaihu, Opeteke and Manganui catchments are above drought flows due to rainfall in these areas this month. Isolated rainfall in Bream Bay has mainly benefited the North River, but the Ruakaka remains low.

The Awanui, Wairoro, Ruakaka and Ahuroa rivers remain very low.

Drought flow map:



Public water supply river flows (litres per second: l/s) as of 12pm 09 March 2020					
FNDC		WDC		KDC	
Awanui	212	Hatea	85	Kaihu	642
Wairoro	12 l/s U/S	Ruakaka	24		
Waitangi	492	Ahuroa	76 (at Braigh Flats)		
Puketotara	131				
Petaka	2.9				

Groundwater levels

Nothing new to report

Lake levels

Nothing new to report

Soil moisture deficits

Nothing new to report