

GOVERNMENT OF TONGA



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MEDIA RELEASE

Drought is now declared for Niuafou'ou and Niuatoputapu. Drought warning remains in place for Ha'apai Tongatapu and 'Eua.

(17 December 2021, Nuku'alofa).

Niuafou'ou is currently experiencing a drought which is ranked the 18th most severe on record. Niuatoputapu is also experiencing a drought which is ranked the 32nd most severe on record. Drought warning remains in force for Ha'apai, Tongatapu and 'Eua. This drought warning has been in effect for 3 months since September. A drought warning is issued when rainfall is below normal and that the amount of rain that has fell in the last three months September to November, (Figure 1) and the November rainfall to date (Table 1.)

Rainfall totals for September– November 2021 (mm)			
	Septem-ber	October	Novem-ber
<u>Niuafou'ou</u>	26.0	56.6	145.1
<u>Niuatoputapu</u>	33.2	20.6	99.7
<u>Vava'u</u>	194.0	144.4	121.7
<u>Ha'apai</u>	97.5	58.3	158.6
<u>Fua'amotu</u>	104.8	110.3	23.6
<u>Nuku'alofa</u>	79.5	113.2	38.2
<u>'Eua</u>	121.0	142.5	55.2
	Below average	Average (usual)	Above average

Figure 1 Rainfall recorded at the main centers during the months of September to November 2021

Niuafou'ou, Niuatoputapu, Ha'apai and Tongatapu had already been under drought warning from September with those islands experiencing below average rainfall particularly Niuafou'ou and Niuatoputapu which saw only 25% of their average month rainfall fall in September rainfall has also seen a continuation of below average rainfall for Niuafou'ou,

Niuatoputapu and Ha'apai experiencing rainfall deficit in October and in November (Refer Table 1).

November 2021 Total rain (mm)	
Niuafou'ou	
Queen Lavinia Airporrt	145.1
Niuafou'ou Airport AWS	207.5
Niuatoputapu	
Mata'aho airport	99.7
Niuatoputapu AWS	94
Vava'u	
Lupepau'u airport	121.7
Fatai AWS	100
Longomapu AWS	58
Lupepau'u AWS	75
Koloa AWS	69.5
Fangatongo AWS	92.5
Ha'apai	
Pilolevu airport	158.6
Nomuka AWS	75
Lifuka AWS	85
Ha'ano AWS	62
Pilolevu Airport AWS	145
Tongatapu	
Mo'unga 'Olive AWS	50
Lapaha AWS	41.5
Fua'amotu	23.6
Fua'amotu Airport AWS	22.5
Toloa AWS	62.5
Houma AWS	35.5
Kanokupolu AWS	40.5
Matatoa AWS	36.5
Nuku'alofa	38.2
Nuku'alofa AWS	23.5
Eua	
Kaufana AWS	55.5
Hango AWS	

Table 1: November 2021 rainfall to date showing rainfall for stations across Tonga.

Although the prediction for the coming 6 months is for average or above average rainfall throughout Tonga during La Nina conditions, drought conditions are currently experienced in most islands in Tonga. These droughts often occur during the transition period from dry to wet season. If these drought conditions persist for another month, water shortages will become problematic for communities throughout the country. Especially for the Niua where rain water catchment tanks are down to their last quarter. NEMO and the National Emergency Management Committee has responded to these water shortages and have dispatched desalination units to Niuafou'ou and Niuatoputapu to cater for the water needs of those communities.

Rainfall Outlook for the next 3 to 6 months

Most of Tonga experienced above average Sea Surface Temperature (SST) in the month of November and September to November 2021. Highest SSTs were 1.0 to 1.5 degrees above average spanning from the south to central division. The predictions are for normal to above normal ocean temperature to the far north of Tonga near the equator) and stay there for the next for 5 to 6 months. Traditionally La Nina brings above average rainfall to the Kingdom and in some months during the peak of summer from December to February total rain could reach twice the monthly average with regular flooding events.

Therefore, current dry conditions are not expected to last too long before good rains should start arriving, However, particular caution should be exercised in-case the rains arrive late and current drought conditions are prolonged.

	Dec 2021– Feb 2022 (% chance)	Mar – May 2022 (% chance)
<u>Niuafo'ou</u>	40	35
<u>Niuaatoputapu</u>	44	34
<u>Vava'u</u>	47	37
<u>Ha'apai</u>	46	40
<u>Fua'amotu & 'Eua</u>	50	44
<u>Nuku'alofa</u>	49	37

Table 1: Forecast for the next 3 months and up to 6 months

Table 2: Rainfall prediction for the next 3 to 6 months. Above average rain (Green) and near average (Yellow)

Some actions that can be taken during times of drought and water shortage

1. **Conserve water** – Use your water tank sparingly or implement water rationing saving water for essential needs only e.g. for drinking
2. **Harvest rainwater** - Encourage the collections of as much water as possible when there is rain
3. **Avoid ploughing** – Avoid ploughing and tilling the soil during drought to keep soil moisture
4. **Irrigation** – Consider irrigation or watering of gardens if you have a constant supply of water
5. **Mulching** – Apply mulching in gardens to keep the soil moist

6. **Boil Drinking Water** – Water is easily contaminated in times of drought. Make sure you boil the water thoroughly

7. **Plan your next steps** – Plan your next steps by following the climate predictions closely and the likely timing of the break of the drought.