

Samoa Meteorology Division Early Action Rainfall Watch (EAR Watch)



The EAR Watch provides disaster managers' with a brief summary of recent rainfall patterns, particularly drought and the rainfall outlook for the coming months. Contact the Samoa Meteorology Division for further climate information.

Issued: January 2019

Rainfall Status:

Meteorological Drought currently exists at Faleolo at the 6-month timescales. A **Drought Watch** is current for Afiamalu at the 3 month timescales and Nafanua at 6 months scale. **Drought Warning** are current at Apia for 3 and 6 months scale as well as Nafanua and Faleolo at 3 months scale.

Rainfall Outlook:

Alert 1 Dry is current for Faleolo and Nafanua. This is likely to enhance dry conditions at both stations. **No Alert** is likely for the next three months for Afiamalu and Faleolo with anticipated dry conditions as moving towards April.



Currently, the ENSO is neutral with 50% chance of El Nino to occur in mid-2019.

Note: Colours do not relate to those below.

Rainfall Status at 31 December 2018 and Outlook for February 2019 to April 2019

Rainfall Stations*	Rainfall Status			Rainfall Outlook		
	Past 12 months	Past 6 months	Past 3 months		Next 3 months	for Nov-Apr
Apia		Warning	Warning		Alert 1 Dry	Alert 1 Dry
Afiamalu		Normal	Watch		No Alert	Alert 2 Dry
Nafanua		Watch	Warning		Alert 1 Dry	Alert 2 Dry
Faleolo		Drought	Warning		No Alert	Alert 1 Dry

Status	Meteorological	Drought	Drought	Status not	Normal or Wetter	Very
Key	Drought	Warning	Watch	available	than normal	Wet
Percentile	1	0 th	25 th	40 th		90 th



Increasing chance of drier 3 months

Increasing chance of wetter 3 months _____

Rainfall Status

The World Meteorological Organization (WMO) recognised Percentile method has been used to assess rainfall status. Meteorological Drought is defined as drought assessed by historical rainfall data only.

Rainfall Outlook

Seasonal outlooks have been produced using SCOPIC v4.4.16 which is a decision-support tool used to generate outlooks for temperature, rainfall and other climate related factors

http://cosppac.bom.gov.au/products-and-services/seasonal-climate-outlooks-in-pacific-island-countries/.

The outlook provides an indication of total three-month rainfall, not how intense the rain may be in any one event, nor how it may vary within the three months. A station is assigned 'No Alert' when near normal rainfall is favoured or there are equal chances of below normal, normal and above normal rainfall. Two months before the dry and wet season, until the start of the season, a second outlook is presented for the upcoming dry or wet season.

Time periods and impacts

The following table provides examples of impacts that have been associated with drought at the 3, 6 and 12 month periods. Note the periods are estimates only and impacts overlap. Allow for uncertainty associated with seasonality, island size, topography, geology, soil type or socio-economic circumstances. Contact the National Disaster Management Office and relevant Department for further information on impacts.

Sector/ Department	12-month period is most relevant for	6-month period is most relevant for	3-month period is most relevant for	
Water	major rivers, deep bores/large aquifer system, reservoirs, dams	small rivers, shallow bores, reservoirs	rainwater tanks, streams, shallow bores	
Environment/ Agriculture	coconuts, breadfruit, mango, banana, fruit trees (nonu, lemon, orange), root crops (yam, taamu, cassava), kava	corn, pineapple, pawpaw, taro, kumala, avocado, cocoa, coffee	traditional vegetables, cabbage, tomatoes, beans, eggplant, watermelon, pasture	
Fire	All Fires	Structural Fire	Bush and Rubbish Fire	
Health	National public health impacts	Increasing public health impacts	Isolated public health impacts	
Tourism				

Samoa rainfall monitoring stations

* Only stations over 25 complete years of rainfall data are used in the EAR Watch.



Contact the Samoa Meteorology Division for further information.

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