

# 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.

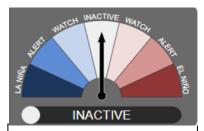
Issued: January 2020

#### **Rainfall Status:**

Most of the stations were in normal conditions at 12 and 6 months timescale. A *drought watch* was in place for Apia and Afiamalu whilst a *drought warning* in place for Nafanua and Faleolo respectively at 3 months timescale.

#### **Rainfall Outlook:**

**No Alert** in all stations with an **Alert 1 Dry** exists at Nafanua station for the next three months.



The current ENSO status is now at *neutral* or *inactive* phase

Note: Colours do not relate to those below.

## Rainfall Status at 31 December 2019 and Outlook for February to April 2020

Rainfall Stations*	Rainfall Status				
	Past 12 months	Past 6 months	Past 3 months		
Apia	Normal	Normal	Watch		
Afiamalu	Normal	Normal	Watch		
Nafanua	Warning	Normal	Warning		
Faleolo	Normal	Watch	Warning		

-	
	Rainfall
	Outlook
	Next 3
	months
	No Alert
	No Alert
	Alert 1 Dry
	No Alert

Status	Meteorological	Drought	Drought	Status not	Normal	Very
Key	Drought	Warning	Watch	available		Wet
Percentile	1	O <sup>th</sup>	25 <sup>th</sup>	40 <sup>th</sup>	!	90 <sup>th</sup>

Outlook	Alert 3 Drv	Alert 2 Drv	Alert 1 Drv	Outlook not	No	Alert 1 Wet	Alert 2 Wet	Alert 3 Wet
Key	Aleit 3 Dry	Alert 2 Dry	Alertibly	available	Alert	Alert i Wet	Aleit 2 Wet	Alert 5 Wet

← 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 <a href="http://cosppac.bom.gov.au/products-and-services/seasonal-climate-outlooks-in-pacific-island-countries/">http://cosppac.bom.gov.au/products-and-services/seasonal-climate-outlooks-in-pacific-island-countries/</a>.

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.

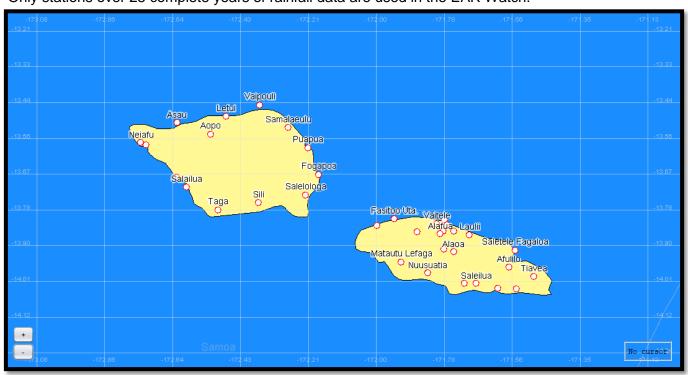
### Time periods and impacts

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

# 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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