



Vanuatu Meteorology and Geo-Hazards Department

Early Action Rainfall Watch (EAR Watch)



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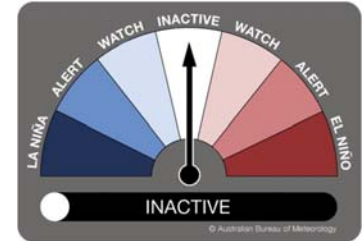
The Early Action Rainfall Watch provides a summary of recent rainfall patterns, particularly the status of the rainfall and the outlook for the coming months. This product will be issued on a monthly basis. For more details and climate information contact the Vanuatu Meteorology and Geo-hazards Department.

Summary

- **ENSO status:** ENSO Outlook has been re-set to INACTIVE.

Rainfall Status: Pekoa, Bauerfield and Whitegrass were on *Meteorological Drought* at a 3-month timescale. Pekoa maintained this status at the 12-month timescale. Only Lamap experiences *Meteorological Drought* at the 6-month timescale.

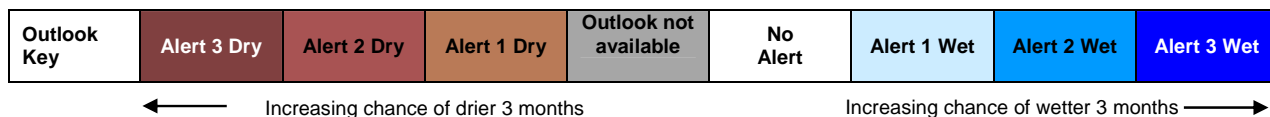
- **Rainfall Outlook:** For the coming three month period, *Alert 2 Dry* is in place for Sola and Aneityum, while *Alert 3 Dry* is in place for all other stations.



Rainfall Status and Outlook

The table below provides information on rainfall status and outlook for Vanuatu. The status refers to rainfall received over the last 3, 6 and 12 months, highlighting very dry or very wet periods relative to normal. The outlook refers to rainfall predicted for the next 3 months as well as the Dry Season. If a station is in drought warning, this indicates an increased likelihood of drought in the coming months. Refer to Vanuatu Climate Update for more details.

		Rainfall Status			Rainfall Outlook	
		12-month period	6-month period	3-month period	Next 3 months	Dry Season
		July 2018 – June 2019	January 2018 – June 2019	April 2019 – June 2019	Aug to Oct 2019	May to Oct 2019
Northern Region	Sola (1971-2019)	Yellow			Alert 2 Dry	Alert 3 Dry
	Pekoa (1971-2019)	Red	Orange	Red	Alert 3 Dry	Alert 3 Dry
	Lamap (1961-2019)	Yellow	Orange	Orange	Alert 3 Dry	Alert 1 Dry
Southern Region	Bauerfield (1972-2019)	Yellow	Orange	Red	Alert 3 Dry	Alert 3 Dry
	Port Vila (1953-2019)	Grey			Alert 3 Dry	Alert 3 Dry
	Whitegrass (1972-2019)	Orange	Orange	Red	Alert 3 Dry	Alert 3 Dry
	Aneityum (1952-2019)				Alert 2 Dry	Alert 3 Dry



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. For further information and details refer to the ENSO handbook and contact the relevant government departments.

Sector/ Department	12-month period	6-month period	3-month period
Water	large water sources e.g. large rivers, lakes Groundwater supply systems affected, water level drops, hand dug wells dry up and groundwater sources become saline. Water quantity dropped and quality affected	dams, bores, industrial tanks, wet lands, medium rivers Rainwater catchments will be heavily affected including rainwater tanks, surface water affected with reduced water level Water quantity and water quality is further reduced	large domestic water tanks, small rivers. Rainwater catchments will be affected & water level reduced. Water quantity reduced and water quality affected
Agriculture	large trees (e.g. coconuts, coffee, mango, guava)	rice, sugarcane, wheat, root crops affected e.g taro, manioc.	pasture, banana, cassava, yam, taro, english potato, kumala, vanilla, chinese cabbage, lettuce
Livestock		loss of large livestock (pigs, goats and cattle)	loss of small livestock (poultry)
Forestry	Loss of large forest – further increase of forest susceptibility to wildfire, insect pests and diseases	Loss large trees (due to increase spread and intensity of insect attacks) Loss of forest canopy affects quality and quantity of water. Increase forest susceptibility to wildfire	Loss of small trees (spread of insects and diseases attacks)
Fisheries		Increase in migration of deep sea fish and increase loss of coral reef fish	Loss of aquaculture Coral reef bleaching Migration of deep sea Fish
Environment	loss of habitat, migration of endemics/species, degradation of landscape & quality, loss of biodiversity/vegetation (extinction), introduction of alien/invasive species, secondary impacts e.g resettlements (2015)	streams/lakes & any water bodies affected, introduction of alien/invasive species	grassland, bushfires, plants and vegetables affected
Health Education Socio-economic	Health - further deterioration in human health (e.g. cases of cholera appear, severe unbalance diet leading to death, cough & staunting, mental stress, diahorrea, skin disease case increases. Education - school close Socio-economic - less income/less production of local produces, bush fires destroying building, reduced river transport on large rivers.	Health - Increase in migration due to water and food shortages. Deterioration in human health (poor lactation, cases of typhoid, increase in respiratory and eye disease), Education - Affect educations and children attendance, increase in social disruption (e.g. reduced school hours) unbalance diet (relying on rice, tinfish & noodles), mental stress, diahorrea, skin disease case increases, Socio-economic - Increase in social disruption (e.g. financial stress, assets being sold, crime, gender based violence). Social obligations being postponed. less income/less production of local produces, bush fires destroying building	Health - Deterioration in human health (malnutrition, poor lactation, increase in sunburn, dehydration and diarrhoea cases), Education - affects schools for children due to water supply, Socio-economic - Unbalance diet/less vegetables, additional labor on children & women, traveling distance to collect water, increase domestic violence, pressure on women & children, increase in psychological/mental stress, skin diseases
Tourism Accommodation: Toilet/Shower Swimming Pool Resturants Flower/garden Water Activities Snokling Kayaking Water Picnic Waterfall Fishing	Airline & transport industry affected, agriculture and fishermen activities affected as well as duty free shops.	Drop in visitors number, reducing the number of employments, reduce in income for business owners. Increase water temperature affecting snokeling, reduce in the water level affect visitors to river activities, driers river level, reduce in income, reduce number of visitions	Poor quality quantity and quality supply of water, inconsistency supply, affect availability of vegetables and others for hotels, flowers and plans drying up.
Infrastructure	Road works thrive on drought as rainfall disturbs & damages roads & infrastructure (bridges & culverts).		
Energy	Infrastructure that depends on water in hydro-power, during drought, river/water level drops, affects generation of electricity		



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Vanuatu rainfall monitoring stations

For further information please contact.

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