



# SOLOMON ISLANDS MALACLIM EARLY ACTION RAINFALL WATCH

July 2019



This bulletin is produced using the MalaClim Model which is based on October to December monthly rainfall to provide Early Warning System for Malaria transmission risk on the North Guadalcanal for the period January to June.

## Coming Up:

- Normal or average Malaria transmission risk is predicted for North Guadalcanal for the period—January to June 2019.
- ENSO Outlook is at INACTIVE Status. That means ENSO status is likely to be Neutral in the coming months.
- Below normal rainfall is predicted for North Guadalcanal region for the period—August to October 2019.

## Malaria Rainfall WATCH Update

Northern Guadalcanal Malaria Early Warning System  
OCTOBER—DECEMBER 2018 Rainfall Thresholds (mm) for Honiara.

**LOWER**  
370

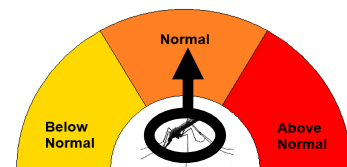
**UPPER**  
540

Total rainfall received for the period **October to December 2018** was **513.9 mm**. This falls between low (370mm) and upper (540mm) thresholds hence, the forecast for the period is consistent with the observed.

### HONIARA RAINFALL UPDATES

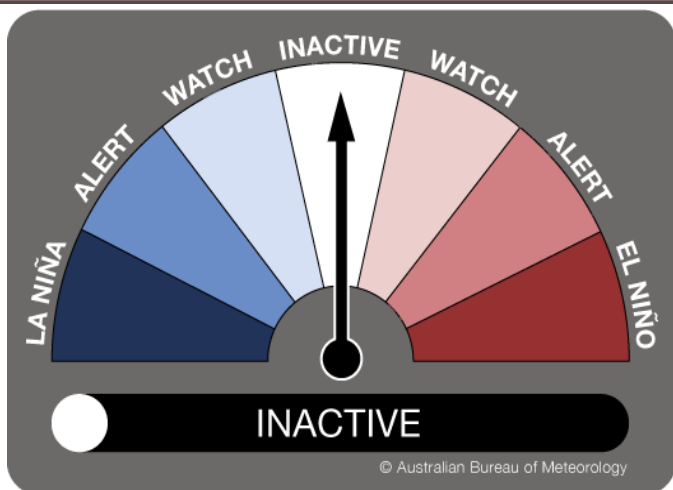
Year	Oct	Nov	Dec	Total
2017	67.1	205.3	363.0	635.4
2018	55.2	61.5	397.2	513.9

“That means the Malaria transmission risk for the Northern Guadalcanal region for the period **January—June 2019** is expected to be **NORMAL or at average** and the number of malaria cases is likely to be around **4122 cases**.”



MALARIA RISK INDEX

## El Nino Southern Oscillation (ENSO) Update



Source—Bureau of Meteorology (BOM), Australia, 9th July 2019.

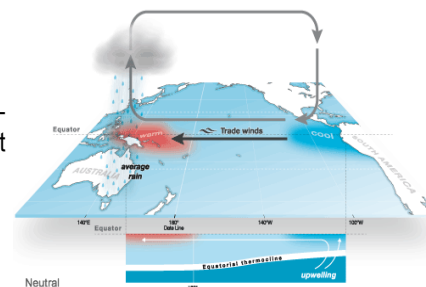
**EL NIÑO**—Associates with Below Normal Rainfall.

**NEUTRAL**—Associates with Normal Rainfall.

**LA NIÑA**—Associates with Above Normal Rainfall.

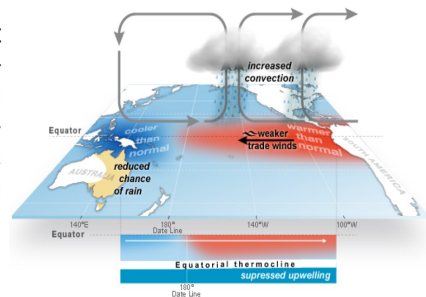
### Current status:

The El Niño Southern Oscillation (ENSO) is still at Neutral status.



### Outlook:

The ENSO outlook is at **INACTIVE status**, meaning ENSO is neutral and there is no clear indications that an El Niño or La Niña event will develop in the coming months.



El Niño—Southern Oscillation (ENSO): El Niño

## Northern Guadalcanal Rainfall Prediction—August to October 2019

HONIARA			HENDERSON		
Above Normal	<i>Rainfall Greater than</i>	<b>359.0 mm</b>	Above Normal	<i>Rainfall Greater than</i>	<b>319.6 mm</b>
Normal	<i>Rainfall Between</i>	<b>259.9 and 359.0 mm</b>	Normal	<i>Rainfall Between</i>	<b>247.0 and 319.6 mm</b>
Below normal	<i>Rainfall Less than</i>	<b>259.9 mm</b>	Below normal	<i>Rainfall Less than</i>	<b>247.0 mm</b>

Below normal rainfall is predicted for Honiara for the period—August to October 2019.

Below normal rainfall is predicted for Henderson for period—August to October 2019.

**Below normal rainfall is most likely predicted for the northern Guadalcanal for the period—August to October 2019.**

### Observed Rainfall—April to June 2019

STATIONS	TOTAL Rainfall (mm)	Forecasted Rainfall (mm)	Forecast Verification	33% Rainfall (mm)	66% Rainfall (mm)	Median Rainfall (mm)
Henderson	376.1	Below Normal	Consistent	303.3	370.7	341.7
Honiara	388.5	Below Normal	Consistent	337.3	469.7	376.0

Below Normal rainfall was predicted for both Honiara and Henderson for the period—April to June 2019.

Observed data shows that the forecasts for the two stations are consistent.

### Malaria case Verification—January to June 2018

Malaria cases for the period—January to June 2018 was predicted for below normal with an expected total of less than **3261** cases. The rainfall observed for the period—October to December 2017 was **635.4mm**, which is more than the **upper 540mm** threshold indicating that there is consistency in **observed rainfall** and **expected number of malaria cases**.

On a similar note, total number of malaria cases (data) received from the Vector Borne Disease Control Program is **840** for Northern Guadalcanal during the malaria season (January to June 2018). The result was consistent to its forecast (**below normal** malaria transmissions) which is significantly less than the forecasted **3261 cases**.

**Disclaimer:**

*The Rainfall WATCH Bulletin provided in this document is presented for the Health sector—Malaria (vector borne) operations. The information should be used as a guide only. Solomon Islands Meteorological Service takes all measures in providing accurate information however, it does not guarantee 100% accuracy of the forecast provided in this summary. The Vector borne operations should be consulted for expert advice, clarification and further information when necessary. The user take all risks resulting indirectly or directly from the use of the rainfall prediction information.*

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