

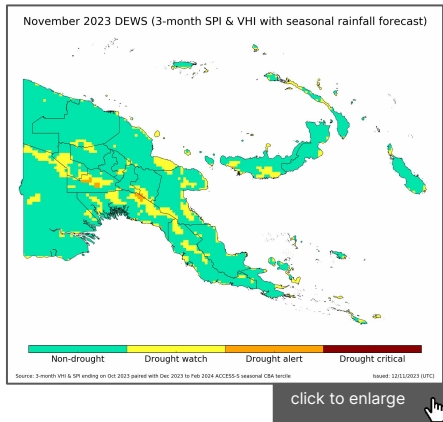
## Key messages

Issued 14/11/2023

Most provinces have experienced well above-average rainfall in recent months, providing relief to drought conditions. Hela on drought watch with severe vulnerability levels. El Niño and positive IOD is underway. While there is still potential that the combined *drying effects* of El Niño and positive IOD are in play, their effects may not be physically visible at this time.

## Drought Early Warning Status (DEWS)

Derived from observed 3-month rainfall and vegetation health, along with 3-month forecasted rainfall.

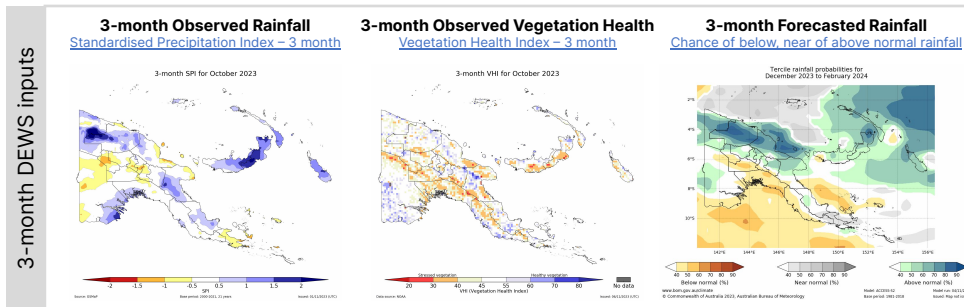


- Drought conditions persist for Hela at 3-month timescales.
- All most all provinces have received well above average rainfall in recent months easing drought conditions at 3-month timescales.
- At the [12-month rainfall timescale](#), deficiencies linger for Bougainville and some areas in the Highlands and Momase provinces. Long term deficiencies will have different impacts to short term rainfall deficiencies. Low groundwater, brackish wells and reduced streamflow may be some impacts observed at this timescale.

### 3-month timescale provincial summary

(A province's overall status is given by its majority status on the map and is presented in this [summary table](#))

<span style="color: yellow;">●</span> Drought Watch	<span style="color: orange;">●</span> Drought Alert	<span style="color: red;">●</span> Drought Critical
Below average rainfall <b>or</b> Stressed vegetation <b>or</b> Dry forecast	(Below average rainfall <b>or</b> Stressed vegetation) <b>and</b> Dry forecast	Below average rainfall <b>and</b> Stressed vegetation <b>and</b> Dry forecast
Hela	No Province	No Provinces



### Links to other timescales:

- [1-month Drought Early Warning Status](#)  
Drought early warning status using 1-month rainfall, 1-month vegetation health and 3-month rainfall forecast.
- [1-month Standardised Precipitation Index](#)  
Rainfall over the last month.
- [1-month Vegetation Health Index](#)  
Vegetation health over the last month.
- [6-month Drought Early Warning Status](#)  
Drought early warning status using 6-month rainfall, 6-month vegetation health and 3-month rainfall forecast.
- [6-month Standardised Precipitation Index](#)  
Rainfall over the last 6 months.
- [6-month Vegetation Health Index](#)  
Vegetation health over the last 6 months.

## Provinces at Risk if Drought Occurs

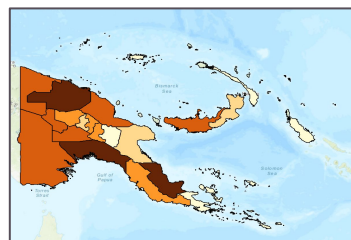
Contextualise drought early warning information with drought risk information.

**Drought risk** is the probability of harmful impacts resulting from interactions between drought hazard, exposure, and vulnerability. Hazard information is given by the Early Warning Status, with drought exposure and vulnerability levels shown in the maps below.

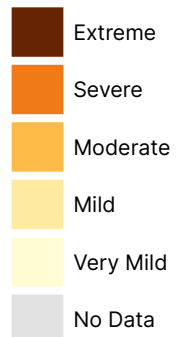
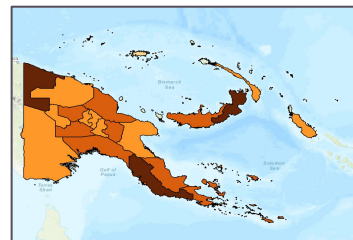
### Provinces of concern:

- **Hela** has a majority Drought Watch status with Moderate exposure levels and Severe vulnerability levels.

**Exposure** - Extent of exposed aspects of the total population and its livelihoods in an area which drought may occur.



**Vulnerability** - Likelihood of exposed factors to suffer negative impacts when drought occurs.



## Climate Context

A summary of the relevant climate drivers affecting PNG over the coming months

- ACCESS-S outlook for December to February forecasts a likely average to above average rainfall for the Momase region, the top half of the Highlands region, and the New Guinea Islands. The southern half of the country is forecasted to receive below average rainfall. ACCESS-S forecast the next fortnight showing a likely below average rainfall throughout the country.
- El Niño is currently in progress. Models indicate further warming of the central to eastern Pacific is likely. This El Niño is likely to continue into at least April 2024.
- A positive Indian Ocean Dipole (IOD) continues. A positive IOD typically can suppress rainfall over much of southern and south-eastern parts of PNG.
- El Niño and its concurrence with the positive IOD can have an "amplifying effect" over the country. Their combined drying effects on PNG are typically stronger and more widespread, potentially leading to reduced rainfall. While there is still some potential in their combined drying effects, their effects are not physically visible at this time.
- The Madden-Julian Oscillation (MJO) is currently weak. Around half of the international climate models indicate that the MJO will progress eastwards across the western Pacific later this week.