

# Monthly Climate Statement – September 2017

## Key messages

- The probability of exceeding median rainfall for the coming summer is currently near-normal for much of Queensland.
- This outlook is based on sea-surface temperatures in the Pacific Ocean which are strongly related to Queensland summer rainfall.
- The outlook for summer rainfall will be updated in October and November to take into account any changes in sea-surface temperatures.

## Summary as at 15 September 2017

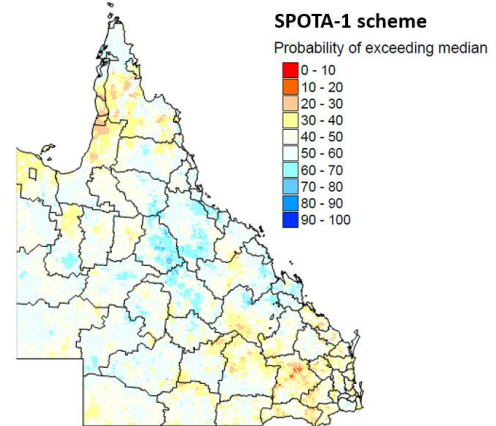
The Department of Science, Information Technology and Innovation (DSITI) monitors sea-surface temperature (SST) anomalies in key regions of the Pacific Ocean over autumn, winter and spring and provides objective outlooks for summer (November to March) rainfall on this basis. **The Science Division of DSITI considers that the probability of exceeding median rainfall for the coming summer (November to March) is currently near-normal for much of Queensland.**

Rainfall in Queensland over spring and summer is strongly influenced by the El Niño-Southern Oscillation (ENSO) — a coupled atmospheric and oceanic phenomenon which is strongly persistent at seasonal timescales. ENSO is a coupled oceanic and atmospheric process. The key oceanic indicator of ENSO is the SST anomaly in the Niño 3.4 region of the Pacific Ocean. The average value of the Niño 3.4 region SST anomaly for the last three-month (June to August) period was +0.3°C. This value is indicative of an ENSO-neutral pattern in the Pacific Ocean. The key atmospheric indicator of ENSO is the Southern Oscillation Index (SOI). The average value of the SOI for the last three-month (June to August) period was +0.2 which is also indicative of an ENSO-neutral pattern.

DSITI provides outlooks for summer rainfall based on an objective analysis of Pacific Ocean SSTs. This analysis currently indicates a near-normal probability of exceeding median rainfall for the coming summer across much of Queensland (see map below). This outlook is consistent with the currently neutral state of the ENSO phenomenon. DSITI will provide a further outlook for summer rainfall in October and November which will take into account any change in the Pacific Ocean SST pattern during that period.

### Probability of Exceeding Median Summer Rainfall

November 2017 – March 2018  
based on the SPOTA-1 Index  
as at September 1, 2017



When interpreting seasonal climate outlook information it should be appreciated that seasonal climate outlooks are probabilistic, rather than deterministic, in nature. For example, if an outlook is described as having a 70 per cent probability of exceeding median rainfall, then there will also be a 30 per cent probability of below median rainfall. Furthermore, in cases where there are high probabilities for a specified outcome, it does not mean that a less probable event will not occur.

For more information please visit the Queensland Government Long Paddock website at: [www.longpaddock.qld.gov.au/seasonalclimateoutlook](http://www.longpaddock.qld.gov.au/seasonalclimateoutlook). Alternatively please contact Stuart Burgess at: [stuart.burgess@dsiti.qld.gov.au](mailto:stuart.burgess@dsiti.qld.gov.au).