Monthly Climate Statement – June 2018

Key messages

- The probability of exceeding median rainfall for the coming summer is currently higher than normal for most of Queensland.
- This long-lead outlook is based on sea-surface temperature anomalies across the Pacific Ocean and factors in the state of the El Niño-Southern Oscillation (ENSO).
- The outlook for summer rainfall will be updated each month from July to November taking into account changes in the Pacific Ocean SST pattern.

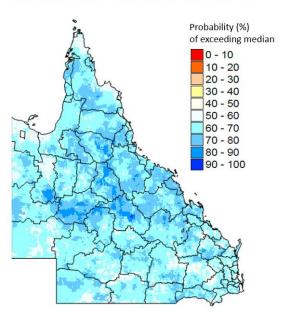
Summary as at 12 June 2018

The Department of Environment and Science (DES) 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 DES considers that the probability of exceeding median summer (November to March) rainfall is currently higher than normal for most of Queensland. This outlook is driven primarily by a warm SST anomaly (+1.0°C) in the south-western Pacific Ocean which is likely to persist over coming months.

At this time of year, the relationship between the El Niño-Southern Oscillation (ENSO) and rainfall for the season ahead is quite weak. However, as winter progresses this relationship begins to strengthen. The Bureau of Meteorology and International climate agencies consider that ENSO is currently in a neutral state, as evidenced by values of key ENSO indices which have been within the ENSO-neutral range over the last two months. In particular, the value of the Niño 3.4 region SST anomaly was -0.4°C for April and -0.1°C for May (compared to -0.7°C for March) and the value of the atmospheric SOI was +4.0 for April and +2.7 for May (compared to +8.4 for March).

Probability of exceeding median summer rainfall

for November 2018 – March 2019, as at 1 June 2018



It should be noted that seasonal outlooks are probabilistic, rather than deterministic, in nature. For example, if an outlook is described as having a 60 per cent probability of above median rainfall, there is also a 40 per cent probability of below median rainfall. In cases where outcomes with a high probability may be more likely, this does not mean that less probable events will not occur in any given year.

DES will provide updated outlooks for summer rainfall each month until the beginning of November, which will factor in the developing ENSO-related SST pattern during this period.

For more information please visit the Queensland Government Long Paddock website at: www.longpaddock.qld.gov.au/seasonal-climate-outlook

Alternatively please contact Stuart Burgess at: stuart.burgess@des.qld.gov.au.

