MONTHLY WEATHER REVIEW - ARMIDALE NSW DECEMBER 2019

December 2019 was a dry and very hot month, although thunderstorms provided some minor relief from the ongoing drought.

The rainfall total of 62.6 millimetres on six days was 26 mm below the average, and December became the ninth consecutive month with below average rain. Despite the dry conditions there were good falls from thunderstorms on the 23rd and 24th - see below.

It was a sunny hot month with day temperatures averaging the highest on record with maximums reaching 30.0 degrees or higher on 19 days. These unusually hot conditions were the result of numerous low pressure troughs developing over New South Wales drawing in very hot air from central Australia.

Thunderstorm activity was lower than normal with storms on four days, and winds were mostly light to moderate westerlies.

Noteworthy events:

11th, 20th, 21st - Maximum temperature records were broken on the 11th (35.2C), the 20th (36.3C) and the 21st which recorded 37.8C. The maximum on the 21st was not only a record high for the month of December, it was also the hottest temperature for any month recorded since 14th January 1939 (38.9C). 23rd/24th - Active low pressure troughs over eastern New South Wales generated thunderstorms on the two days before Christmas. Armidale recorded 19.2 mm from the storms on the 23rd and a further 25.4 mm on

days before Christmas. Armidale recorded 19.2 mm from the storms on the 23rd and a further 25.4 mm of the 24th to give a total of 44.6 mm for the two days. This was the best two day rain total this year and provided some welcome relief from the ongoing severe drought.

8th - Bushfires burning to the east of Armidale caused a smoke haze over the city on 15 days of the month. The smoke was particularly thick in the morning of the 8th with visibility reduced to around 200 metres at 6am making it unpleasant to be outdoors. The thick smoke remained for the rest of day with the visibility remaining at around 600 metres or less.

DECEMBER 2019 STATISTICS (long term averages in brackets)

Rainfall: 62.6 mm (88.7 mm)

Rain days: 6 (10)

2019 rainfall total: 306.6 mm (782.4 mm) Average maximum temp: 30.4 deg (25.2 deg) Average minimum temp: 11.8 deg (11.2 deg) Highest maximum temp: 37.8 deg on the 21st Lowest maximum temp: 20.4 deg on the 2nd Highest minimum temp: 17.7 deg on the 24th Lowest minimum temp: 3.8 deg on the 3rd

Fine sunny days: 20 (15) Ideal weather days: 2 (1) Days with thunderstorms: 4 (8)

Days with frosts: 0 (0) Days with fogs: 0 (1)

Wind direction at airport at 3pm & number of days: W: 12, E: 9, SW: 4, S: 2, NE: 2, NW: 1, N: 1

Average daily pan evaporation: 7.1 mm (5.1 mm)

Thunderstorm details:

11th: 2.40-7.30pm - moderate & slight storms, 5.6 mm rain

12th: 5.405.50pm thunder heard, no rain 23rd: 4.15-4.30pm - thunder heard, no rain

6.05-6.15pm - slight storm from west

11.25pm-12.20am slight storm from west

24th: 5.30-5.45am approx - slight storm from west

12.30-1.00pm - thunder heard, no rain

1.00-2.00pm - moderate storms from south-west - 25.4 mm rain; 2.00-2.30pm - thunder heard, no rain