2 February 2017

UNDER EMBARGO Until 4.30pm today

Summary of key issues

• During the week ending 1 February 2017, rainfall was recorded across most states and territories, with the highest totals across tropical northern Australia, coastal Queensland and southern Western Australia.

• After several large rainfall events during January, the northern wet season is quickly turning into one of the best on record for many parts of Western Australia's north.

• Maximum and minimum temperatures were between 2°C and 6°C above average across much of south-eastern Australia for the week ending 31 February 2017.

• During January 2017 extremely high rainfall was recorded over most of Western Australia, South Australia and the Northern Territory. For northern and western Queensland and western Victoria, rainfall was well above average for January 2017.

• The forecast for the next eight days indicates that rainfall is expected across much of Australia with totals forecast to exceed 50 millimetres for western and northern Australia.

• The El Niño–Southern Oscillation (ENSO) remains neutral, with all ENSO indicators currently within the ENSO-neutral range.

• Water storage levels in the Murray–Darling Basin (MDB) decreased by 423 gigalitres (GL) during the week ending 2 February 2017 to 17,402 GL, and are at 77 per cent of total capacity.

• The Australian feed barley indicator price (Sydney) was $170 in the week ending 1 February 2017, 3 per cent higher than the previous week. However, the barley indicator price continues to be suppressed by the record harvest and is 28 per cent lower than in February 2016.

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1. Climate

1.1. Rainfall this week

For the week ending 1 February 2017, rainfall was recorded in most states and territories, with the exception being South Australia and Victoria which recorded little or no rainfall for the week. Rainfall totals up to 150 millimetres occurred across tropical northern Australia, coastal Queensland and southern Western Australia (see map below). Rainfall totals above 15 millimetres were recorded in north-east New South Wales, southern Queensland, western Tasmania and central Northern Territory. The highest recorded weekly total was 274 millimetres near Innisfail in northern Queensland.

After several large rainfall events during January, the northern wet season is quickly turning into one of the best on record for many parts of Western Australia’s north. While the tropical low which swept across the north last week failed to turn into a cyclone, it delivered steady rain to the Kimberley and parts of the Pilbara and Gascoyne. Kununurra in the Kimberley recorded its wettest January on record, receiving just under 600 millimetres, while Fitzroy Crossing’s rainfall total of 740 millimetres between 1 October 2016 and 31 January 2017, is the highest the town has received since records started in 1893.

The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited quality control. They are intended to provide a general overview of rainfall across Australia as quickly as possible after the observations are received.

For further information go to http://www.bom.gov.au/climate/rainfall/

[Map of rainfall for the week ending 1 February 2017]
### 1.2. Temperature anomalies this week

For the week ending 31 January 2017, maximum temperatures were between 2°C and 6°C above average across much of New South Wales and southern Queensland. Maximum temperatures were between 2°C and 6°C below average in the Northern Territory and northern Western Australia. Minimum temperatures were between 2°C and 8°C above average for parts of eastern, western and central Australia, and close to average for the rest of the country (see maps below).

#### Maximum temperature anomalies for the week ending 31 January 2017

![Maximum temperature anomaly map](image1.png)

#### Minimum temperature anomalies for the week ending 31 January 2017

![Minimum temperature anomaly map](image2.png)

Note: Spatial temperature analyses are based on historical weekly temperature data provided by the Bureau of Meteorology. These temperature anomaly maps show the departure of the maximum and minimum temperatures from their long-term averages. Temperature anomalies are calculated using high-resolution gridded datasets from 1911 onwards. For further information go to [http://www.bom.gov.au/jsp/awap/temp/index.jsp](http://www.bom.gov.au/jsp/awap/temp/index.jsp).
1.3. Monthly rainfall

Following Australia’s fifth-wettest December on record, a number of low pressure systems combined with the monsoon trough to deliver high rainfall totals across the western two thirds of Australia. Australia as a whole recorded its eighth-wettest January on record, while area-averaged January rainfall was the third-highest on record for Western Australia, the eighth-highest on record for the Northern Territory and the ninth-highest on record for South Australia.

During January 2017 extremely high rainfall was recorded over most of Western Australia, South Australia and the Northern Territory. For northern and western Queensland and western Victoria recorded rainfall was well above average for January 2017. Rainfall was below average throughout isolated areas of eastern New South Wales and eastern Victoria. While some isolated areas of south-west Western Australia, north and south Queensland, and the Northern Territory recorded severe deficiencies.

Rainfall in cropping regions for January 2017 was above average in Western Australia, South Australia and Victoria, and below average to average in Queensland and New South Wales.

Rainfall percentiles for January 2017

Source: Bureau of Meteorology

Note: Spatial rainfall percentile analyses are based on historical monthly rainfall data provided by the Bureau of Meteorology. These rainfall percentile maps show how rainfall recorded during that given time period compared with the rainfall recorded for that same period during the entire historical record (1900 to present). Rainfall percentiles are a way of providing an indication of the spread of data in a data set. To calculate percentiles, the entire rainfall record at a certain point is divided into one hundred equal parts. The 5th percentile for January 2017 means that only five per cent of all Januaries in the historical record have recorded a rainfall total that is at or below the rainfall recorded during January 2017. Dark blue areas on the maps are those areas that were wetter than the same time of year during the entire historical record, and dark red areas are drier. For further information, go to http://www.bom.gov.au/jsp/awap/
1.4. Rainfall forecast

The forecast for the next eight days indicates that rainfall is expected across much of Australia, with the exception of large areas of southern Queensland, north-east South Australia, and parts of north-west New South Wales. The highest weekly rainfall totals are forecast for western and northern Australia, with totals forecast to exceed 50 millimetres in these areas (see map below). This rainfall forecast is produced from computer models. As it contains no input from weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

**Total forecast rainfall (mm) for the period 2 February to 9 February 2017**

![Rainfall Map]

1.5. El Niño–Southern Oscillation Update

The El Niño–Southern Oscillation (ENSO) remains neutral, with all ENSO indicators currently within the ENSO-neutral range.

Climate model outlooks indicate the tropical Pacific Ocean is likely to remain ENSO-neutral through the southern summer and autumn. Most models surveyed expect the tropical Pacific Ocean to warm during this period, meaning La Niña is the least likely scenario for winter/spring 2017. It should be noted that model outlooks that span the southern autumn period tend to have lower accuracy than outlooks issued at other times of the year. This means outlooks beyond May should be used with some caution.

The Indian Ocean Dipole has little influence on Australian climate from December to April.
2. Water

2.1. Water availability

Water storage levels in the Murray–Darling Basin (MDB) decreased by 423 gigalitres (GL) during the week ending 2 February 2017 to 17,402 GL, and are at 77 per cent of total capacity. This water storage level is 40 percentage points or 9,119 GL more than at the same time last year.

Information on irrigation water available in the Murray–Darling Basin from 1 January 2001 to 2 February 2017 is shown above. The top horizontal (short dash) line indicates the storage level during a similar time last year. The bottom horizontal (long dash) line indicates the amount of ‘dead’ or unusable storage.
### 2.2. Water storages

Changes in regional water storage for January 2017 and the previous 12 months are summarised in the table and graph below (current at 2 February 2017).

<table>
<thead>
<tr>
<th>Region</th>
<th>Total capacity (GL)</th>
<th>Current volume (GL)</th>
<th>Current volume (%)</th>
<th>Monthly change (GL)</th>
<th>Monthly change (%)</th>
<th>Annual change (GL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray-Darling Basin (MDB)</td>
<td>22,558</td>
<td>17,402</td>
<td>77</td>
<td>-1,568</td>
<td>-7</td>
<td>9,119</td>
</tr>
<tr>
<td>Murray-Darling Basin Authority (MDBA)</td>
<td>9,352</td>
<td>7,062</td>
<td>73</td>
<td>-557</td>
<td>-6</td>
<td>3,897</td>
</tr>
<tr>
<td>Queensland MDB</td>
<td>186</td>
<td>100</td>
<td>54</td>
<td>-29</td>
<td>-15</td>
<td>-21</td>
</tr>
<tr>
<td>Central Queensland</td>
<td>3,150</td>
<td>2,759</td>
<td>88</td>
<td>514</td>
<td>16</td>
<td>966</td>
</tr>
<tr>
<td>South-east Queensland</td>
<td>3,500</td>
<td>2,107</td>
<td>60</td>
<td>20</td>
<td>1</td>
<td>-170</td>
</tr>
<tr>
<td>New South Wales MDB</td>
<td>13,924</td>
<td>10,736</td>
<td>77</td>
<td>-1,308</td>
<td>-9</td>
<td>6,414</td>
</tr>
<tr>
<td>Coastal New South Wales</td>
<td>1,074</td>
<td>956</td>
<td>89</td>
<td>-19</td>
<td>-2</td>
<td>11</td>
</tr>
<tr>
<td>Victoria MDB</td>
<td>8,488</td>
<td>6,666</td>
<td>79</td>
<td>-132</td>
<td>-2</td>
<td>2,826</td>
</tr>
</tbody>
</table>
3. Commodities

3.1. Market focus

Domestic Barley

The Australian feed barley indicator price (Sydney) was $170 in the week ending 1 February 2017, 3 per cent higher than the previous week. However, the barley indicator price—at 28 per cent lower than in February 2016—continues to be suppressed by the record harvest. The ABARES estimate of the 2016–17 barley crop will be updated in the February edition of the Australian crop report due to be released 14 February 2017.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected World Indicator Prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Dollar - AUD/USD Exchange Rate</td>
<td>01-Feb</td>
<td>US$/A$</td>
<td>0.76</td>
<td>0.76</td>
<td>0%</td>
<td>0.71</td>
<td>7%</td>
</tr>
<tr>
<td>Wheat - US no. 2 hard red winter wheat, fob Gulf</td>
<td>31-Jan</td>
<td>US$/t</td>
<td>207</td>
<td>205</td>
<td>&lt;1%</td>
<td>212</td>
<td>-3%</td>
</tr>
<tr>
<td>Coarse Grains - US no. 2 yellow corn, fob Gulf</td>
<td>01-Feb</td>
<td>US$/t</td>
<td>164</td>
<td>161</td>
<td>-2%</td>
<td>165</td>
<td>-2%</td>
</tr>
<tr>
<td>Canola - Rapeseed, Europe, fob Hamburg</td>
<td>31-Jan</td>
<td>US$/t</td>
<td>459</td>
<td>457</td>
<td>&lt;1%</td>
<td>400</td>
<td>14%</td>
</tr>
<tr>
<td>Cotton - Cotlook ‘A’ Index</td>
<td>01-Feb</td>
<td>USc/lb</td>
<td>82.6</td>
<td>83.6</td>
<td>1%</td>
<td>68.0</td>
<td>23%</td>
</tr>
<tr>
<td>Sugar - Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>01-Feb</td>
<td>USc/lb</td>
<td>20.4</td>
<td>20.5</td>
<td>&lt;1%</td>
<td>13.0</td>
<td>58%</td>
</tr>
<tr>
<td>Wool - Eastern Market Indicator</td>
<td>26-Jan</td>
<td>Ac/kg clean</td>
<td>1434</td>
<td>1412</td>
<td>-2%</td>
<td>1280</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Global Dairy Trade (GDT) weighted average prices a</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy - Whole milk powder</td>
<td>17-Jan</td>
<td>US$/t</td>
<td>3,294</td>
<td>3,283</td>
<td>&lt;1%</td>
<td>2,188</td>
<td>50%</td>
</tr>
<tr>
<td>Dairy - Skim milk powder</td>
<td>17-Jan</td>
<td>US$/t</td>
<td>2,660</td>
<td>2,612</td>
<td>-2%</td>
<td>1,835</td>
<td>42%</td>
</tr>
<tr>
<td>Dairy - Cheddar cheese</td>
<td>17-Jan</td>
<td>US$/t</td>
<td>3,894</td>
<td>3,940</td>
<td>1%</td>
<td>2,867</td>
<td>37%</td>
</tr>
<tr>
<td>Dairy - Anhydrous milk fat</td>
<td>17-Jan</td>
<td>US$/t</td>
<td>5,352</td>
<td>5,528</td>
<td>3%</td>
<td>3,724</td>
<td>48%</td>
</tr>
<tr>
<td><strong>Selected domestic crop indicator prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grain Sorghum - Sydney, NSW</td>
<td>01-Feb</td>
<td>A$/t</td>
<td>248</td>
<td>248</td>
<td>0%</td>
<td>268</td>
<td>-7%</td>
</tr>
<tr>
<td>Feed Wheat - General purpose, Sydney, NSW</td>
<td>02-Apr</td>
<td>A$/t</td>
<td>209</td>
<td>204</td>
<td>-2%</td>
<td>280</td>
<td>-27%</td>
</tr>
<tr>
<td>Feed Barley - Sydney, NSW</td>
<td>01-Feb</td>
<td>A$/t</td>
<td>170</td>
<td>175</td>
<td>3%</td>
<td>243</td>
<td>-28%</td>
</tr>
<tr>
<td>Canola - Portland, Vic.</td>
<td>30-Jan</td>
<td>A$/t</td>
<td>515</td>
<td>532</td>
<td>3%</td>
<td>530</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Selected domestic livestock indicator prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beef - Young cattle (300-400 kg live weight C3), Qld</td>
<td>28-Jan</td>
<td>Ac/kg cwt</td>
<td>575</td>
<td>600</td>
<td>-4%</td>
<td>584</td>
<td>-2%</td>
</tr>
<tr>
<td>Mutton - Mutton indicator (18-24 kg fat score 2-3), Vic</td>
<td>27-Jan</td>
<td>Ac/kg cwt</td>
<td>428</td>
<td>403</td>
<td>-6%</td>
<td>267</td>
<td>51%</td>
</tr>
<tr>
<td>Lamb - Lamb indicator (18-22 kg fat score 2-4), Vic</td>
<td>27-Jan</td>
<td>Ac/kg cwt</td>
<td>617</td>
<td>600</td>
<td>-3%</td>
<td>534</td>
<td>12%</td>
</tr>
<tr>
<td>Pig - Pig indicator (Buyers 60.1-75 kg), NSW</td>
<td>21-Jan</td>
<td>Ac/kg cwt</td>
<td>368</td>
<td>363</td>
<td>-1%</td>
<td>387</td>
<td>-6%</td>
</tr>
</tbody>
</table>

a Global Dairy Trade prices are updated twice monthly on the first and third Tuesday of each month.
3.2. Selected world indicator prices

**World wheat indicator price**
- US No. 2, hard red winter wheat, fob Gulf
- Week ended 31 January 2017

**World coarse grains indicator price**
- US corn No. 2, fob Gulf
- Week ended 1 February 2017

**World canola indicator price**
- Europe fob Hamburg
- Week ended 31 January 2017

**World cotton indicator price**
- Cotlook ‘A’ index
- Week ended 1 February 2017
3.3. Global Dairy Trade (GDT) weighted average prices

![Whole milk powder price chart](chart1)

![Skim milk powder price chart](chart2)

![Cheddar cheese price chart](chart3)

![Anhydrous milk fat price chart](chart4)
3.4. Selected domestic crop indicator prices

Grain sorghum indicator price
Sydney, NSW
Week ended 1 February 2017

Feed wheat indicator price
General Purpose, Sydney, NSW
Week ended 1 February 2017

Feed barley indicator price
Sydney, NSW
Week ended 1 February 2017

Canola indicator price
Portland, Victoria
Week ended 30 January 2017
3.5. Selected domestic livestock indicator prices

- Young cattle indicator price in Qld (330–400 kg live weight C3)
  Week ended 28 January 2017

- Lamb indicator price in Victoria (18–22 kg fat score 2–4)
  Week ended 27 January 2017

- Mutton indicator price in Victoria
  (18–24 kg fat score 2–3)
  Week ended 27 January 2017

- Pig indicator price in NSW
  Buyers 60.1–75 kg,
  Week ended 21 January 2017
3.6. Movements in selected fruit and vegetable prices – week ended 21 January 2017
4. Data attribution

Climate

Bureau of Meteorology


Water

New South Wales


Queensland


South Australia


Victoria


Commodities

Fruit and vegetables


Mutton, lambs, wheat, barley and grain sorghum


Cattle, mutton and lambs


Pigs


Canola

- Weekly Times: hardcopy

Dairy