Summary of key issues

- During the week ending 7 June 2017 little to no rainfall was recorded across most of mainland Australia with the exception of coastal parts of New South Wales, eastern Victoria and western Tasmania, where weekly rainfall totals exceeded 25 millimetres.

- During the week ending 6 June 2017 maximum temperatures were close to average across much of the country with the exception of above average temperatures in Western Australia. Minimum temperatures were below average to average for most of central, southern and eastern Australia due to a slow moving high pressure system.

- Relative lower layer soil moisture for May 2017 was close to average across much of Australia. The main exceptions were extremely high soil moisture across parts of north-eastern Australia and extremely low soil moisture in western parts of Western Australia.

- The forecast for the next eight days indicates that little to no rainfall is expected across most of mainland Australia, with the exception of coastal New South Wales and the Gascoyne region of Western Australia.

- While there is still a chance of El Niño development later in the year, models have reduced the extent of predicted ocean warming compared to earlier in the year, indicating that if an El Niño forms, it is likely to be weak.

- Water storage levels in the Murray–Darling Basin (MDB) increased by 94 gigalitres (GL) during the week ending 8 June 2017 to 15,445 GL and are at 68 per cent of total capacity.

- Allocation prices in the southern Murray-Darling Basin remained low in the week up to 8 June 2017 in most systems. Average prices across the whole southern system fell to $15.20.

- World sugar prices fell by 8 per cent following record exports from Brazil.

- The cheddar cheese price rose 15 per cent at the latest global dairy trade auction.
1. Climate

1.1. Rainfall this week

During the week ending 7 June 2017 little to no rainfall was recorded across most of mainland Australia. Rainfall totals exceeding 25 millimetres were recorded in coastal parts of New South Wales, eastern Victoria and western Tasmania. Similar totals were recorded in parts of coastal Queensland around Cairns. The highest recorded weekly total was 140 millimetres at Nelson Bay, north of Newcastle in New South Wales.

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/

Rainfall for the week ending 7 June 2017
1.2. Temperature anomalies this week

During the week ending 6 June 2017 maximum temperatures were close to average across much of the country with the exception of Western Australia where temperatures were between 2°C and 8°C above average. Minimum temperatures were generally below average for most of central, southern and eastern Australia due to a slow moving high pressure system. Parts of South Australia recorded minimum temperatures between 6°C and 10°C below average for this time of year. In contrast, minimum temperatures were between 2°C and 4°C above average in parts of western and northern Australia.

Maximum temperature anomalies for the week ending 6 June 2017

Minimum temperature anomalies for the week ending 6 June 2017

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.
1.3. Recent soil moisture percentiles

The maps below show the levels of modelled upper layer (0 to 10 centimetres) soil moisture and lower layer (10 centimetres to 1 metre) soil moisture during May 2017. These maps show how modelled soil conditions during May 2017 compare with May conditions modelled over the 105 year reference period (1911 to 2015). Dark blue areas on the maps are those areas that were much wetter than the same time of year during the reference period, and dark red areas were much drier than during the reference period. These data are from the Australian Water Resources Assessment Landscape model (AWRA-L version 5.0), which was developed through the Water Information Research and Development Alliance (WIRADA) initiative. WIRADA is a collaborative project between the BoM and the CSIRO.

The bulk of plant roots occur in the top 20 centimetres of the soil profile. Soil moisture in the upper layer of the soil profile (10 centimetres) is therefore the most appropriate indicator of the availability of water, particularly for germinating plants. The lower layer soil moisture is a larger, deeper store that is slower to respond to rainfall and tends to reflect accumulated rainfall events over longer time periods.

Relative upper layer soil moisture for May 2017 was close to average across much of Australia. The main exceptions were extremely high soil moisture across parts of north-eastern Australia and extremely low soil moisture in western parts of Western Australia. It was also extremely low in isolated parts of central and western Queensland, central parts of the Northern Territory, western and southern South Australia and eastern Victoria. The pattern of relative upper layer soil moisture reflects May 2017 rainfall.

Modelled upper layer soil moisture for May 2017

Source: Bureau of Meteorology (Australian Water Resources Assessment Landscape model)
Relative lower layer soil moisture for May 2017 was well above average to extremely high in north-eastern and south-western New South Wales, western Victoria, eastern Queensland and central South Australia. It was also above average across much of Western Australia and northern parts of the Northern Territory. In contrast, lower layer soil moisture was well below average to extremely low across central and western Queensland and adjacent areas of the Northern Territory, western and southern South Australia and much of western Western Australia.

Modelled lower layer soil moisture for May 2017

Source: Bureau of Meteorology (Australian Water Resources Assessment Landscape model)
1.4. Rainfall forecast for the next 8 days

The forecast for the next eight days indicates that little to no rainfall is expected across most of mainland Australia, with the exception of coastal New South Wales and the Gascoyne region of Western Australia. The first east coast low of winter is expected to bring heavy rain and windy conditions to parts of the New South Wales coast, with cumulative rainfall totals expected to exceed 50 millimetres along much of the coastline.

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 8 to 15 June 2017

1.5. El Niño–Southern Oscillation Update

Sea surface temperatures across the tropical Pacific remain warmer than average, though cooling has occurred in some areas over recent weeks in response to stronger than average trade winds. The El Niño–Southern Oscillation (ENSO) remains neutral and the Bureau of Meteorology’s ENSO Outlook is at El Niño WATCH.

Four out of eight international climate models suggest tropical Pacific Ocean sea surface temperatures may exceed El Niño thresholds during the second half of 2017. Virtually all models have reduced the extent of predicted ocean warming compared to earlier in the year, indicating that if an El Niño forms, it is likely to be weak. If the tropical Pacific remains warmer than average, but El Niño thresholds are not quite met, some El Niño-like effects are still possible.

The Indian Ocean Dipole (IOD) remains neutral. Four out of six climate models suggest a positive IOD may develop by the end of winter. However, model accuracy for the IOD at this time of year is low. A positive IOD is typically associated with a drier than average winter and spring for southern and central Australia (Bureau of Meteorology ‘ENSO Wrap-up’, 6 June 2017).
2. Water

2.1. Water availability

Water storage levels in the Murray–Darling Basin (MDB) increased during the week ending 8 June 2017 by 94 gigalitres (GL) to 15,445 GL and are at 68 per cent of total capacity. This is 35 percentage points or 7,970 GL more than at the same time last year.

Information on irrigation water available in the Murray–Darling Basin from 1 January 2001 to 8 June 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 allocations

The current water allocations for the 2017–18 water trading season for licence holders in New South Wales, Victorian and South Australian water systems are summarised in the following table. The only change is general security allocations in the Gwydir Valley (NSW) which increased to 78.6 per cent.

<table>
<thead>
<tr>
<th>New South Wales</th>
<th>8 June 2017</th>
<th>4 May 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Murray Valley</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Murrumbidgee Valley</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Lower Darling</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Macquarie and Cudgegong Valley</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Hunter Valley</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Lower Namoi</td>
<td>125%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Upper Namoi</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>NSW Gwydir Valley</td>
<td>78.6%</td>
<td>77.8%</td>
</tr>
<tr>
<td>NSW Border Rivers</td>
<td>100%(a) / 113%(b)</td>
<td>100%(a) / 113%(b)</td>
</tr>
<tr>
<td>NSW Peel Valley</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Victoria</th>
<th>Low reliability</th>
<th>High reliability</th>
<th>Low reliability</th>
<th>High reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria Murray Valley</td>
<td>5%</td>
<td>100%</td>
<td>5%</td>
<td>100%</td>
</tr>
<tr>
<td>Victoria Goulburn</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Victoria Campaspe</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Victoria Loddon</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Victoria Bullarook</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Victoria Broken</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>South Australia</th>
<th>High security</th>
<th>High security</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Australia Murray</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Carryover water may also be available.

(a) General Security A class. (b) General Security B class
2.3. Water markets

Allocation prices in the southern Murray-Darling Basin remained low in the week up to 8 June 2017 in most systems. Average prices across the whole southern system fell to $15.20. This is a decrease of $1.77 or 10 per cent from the same time last week. This contrasts with an average price of $22.67 in May across the whole southern MDB.

Allocation trade activity in the southern Murray-Darling Basin

The trades shown reflect market activity and do not encompass all register trades. The price line reflects locally fitted price values for the entire southern Murray—Darling Basin. Data shown is current until Thursday 8 June 2017.

| Allocation trade prices, southern Murray-Darling Basin (price per ML) |
|-------------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Southern MDB | Goulburn | South Australia | Murrumbidgee | Victoria Murray | NSW Murray |
| Current week: 02/06/17 - 08/06/17 | $15.20 | $28.54 | $25.37 | $4.95 | $26.51 | $12.42 |
| Last week: 26/05/17 - 01/06/17 | $16.97 | $26.57 | $25.44 | $4.79 | $25.92 | $16.57 |
| May 2017 | $22.67 | $27.83 | $29.92 | $5.50 | $27.70 | $23.90 |
| May 2016 | $233.65 | $251.07 | $253.98 | $190.14 | $249.59 | $220.62 |
3. Commodities

3.1. Market focus

Sugar prices
According to the FO Licht International Sugar & Sweetener Report, Brazil exported a monthly record of 2.5 million tonnes of sugar in May 2017, 9 per cent higher than the previous record set in 2009. This resulted in world sugar prices falling by 8 per cent in the week ending 7 June 2017 to average US14 cents a pound.

Dairy prices
The average price for cheddar cheese rose 15 per cent at the global dairy auction (GDT) event on 6 June 2017 to US$4,285 a tonne. This is the highest average price for cheddar on the GDT since June 2014. The average price for skim milk powder rose by 8 per cent, while the average price for whole milk powder fell by 5 per cent.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Price week prior</th>
<th>Weekly change</th>
<th>Price 12 months prior</th>
<th>Year on year change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected World Indicator Prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australian Dollar – AUD/USD Exchange Rate</td>
<td>07-Jun</td>
<td>US$/A$</td>
<td>0.74</td>
<td>0.74</td>
<td>0%</td>
<td>●</td>
<td>0.73 1% ↑</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>202</td>
<td>202</td>
<td>0%</td>
<td>●</td>
<td>205 -1% ↓</td>
</tr>
<tr>
<td>Coarse Grains – US no. 2 yellow corn, fob Gulf</td>
<td>07-Jun</td>
<td>US$/t</td>
<td>161</td>
<td>159</td>
<td>1%</td>
<td>↑</td>
<td>184 -13% ↓</td>
</tr>
<tr>
<td>Canola – Rapeseed, Europe, fob Hamburg</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>412</td>
<td>424</td>
<td>-3%</td>
<td>↓</td>
<td>426 -3% ↓</td>
</tr>
<tr>
<td>Cotton – Cotlook 'A' Index</td>
<td>07-Jun</td>
<td>USc/lb</td>
<td>86.9</td>
<td>87.2</td>
<td>&lt;1%</td>
<td>↓</td>
<td>73.2 19% ↑</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>07-Jun</td>
<td>USc/lb</td>
<td>14.0</td>
<td>15.2</td>
<td>-8%</td>
<td>↓</td>
<td>18.8 -26% ↓</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>01-Jun</td>
<td>Ac/kg clean</td>
<td>1,472</td>
<td>1,495</td>
<td>-2%</td>
<td>↓</td>
<td>1,296 14% ↑</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>26-May</td>
<td>Ac/kg clean</td>
<td>1,520</td>
<td>1,535</td>
<td>&lt;1%</td>
<td>↓</td>
<td>1,375 11% ↑</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>Milling Wheat – ASW1, track quote, Port Adelaide, SA</td>
<td>06-Jun</td>
<td>A$/t</td>
<td>204</td>
<td>198</td>
<td>3%</td>
<td>↑</td>
<td>256 -20% ↓</td>
</tr>
<tr>
<td>Feed Wheat – General purpose, Sydney, NSW</td>
<td>07-Jun</td>
<td>A$/t</td>
<td>239</td>
<td>235</td>
<td>2%</td>
<td>↑</td>
<td>268 -11% ↓</td>
</tr>
<tr>
<td>Feed Barley – Sydney, NSW</td>
<td>10-May</td>
<td>A$/t</td>
<td>214</td>
<td>214</td>
<td>0%</td>
<td>●</td>
<td>226 -5% ↓</td>
</tr>
<tr>
<td>Canola – Portland, Vic.</td>
<td>05-Jun</td>
<td>A$/t</td>
<td>503</td>
<td>510</td>
<td>-1%</td>
<td>↓</td>
<td>535 -6% ↓</td>
</tr>
<tr>
<td>Grain Sorghum – Sydney, NSW</td>
<td>07-Jun</td>
<td>A$/t</td>
<td>272</td>
<td>272</td>
<td>0%</td>
<td>●</td>
<td>251 8% ↑</td>
</tr>
<tr>
<td><strong>Selected domestic livestock indicator prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beef – Eastern Young Cattle Indicator</td>
<td>01-Jun</td>
<td>Ac/kg cwt</td>
<td>652</td>
<td>652</td>
<td>0%</td>
<td>●</td>
<td>568 15% ↑</td>
</tr>
<tr>
<td>Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic</td>
<td>02-Jun</td>
<td>Ac/kg cwt</td>
<td>557</td>
<td>550</td>
<td>1%</td>
<td>↑</td>
<td>377 48% ↑</td>
</tr>
<tr>
<td>Lamb – Eastern States Trade Lamb Indicator</td>
<td>01-Jun</td>
<td>Ac/kg cwt</td>
<td>671</td>
<td>663</td>
<td>1%</td>
<td>↑</td>
<td>593 13% ↑</td>
</tr>
<tr>
<td>Pig – Eastern Seaboard (60.1–75 kg), average of buyers &amp; sellers</td>
<td>26-May</td>
<td>Ac/kg cwt</td>
<td>299</td>
<td>297</td>
<td>&lt;1%</td>
<td>↑</td>
<td>384 -22% ↓</td>
</tr>
<tr>
<td>Goat – Eastern States (12.1–16 kg)</td>
<td>05-Jun</td>
<td>Ac/kg cwt</td>
<td>656</td>
<td>656</td>
<td>0%</td>
<td>●</td>
<td>550 19% ↑</td>
</tr>
<tr>
<td>Live cattle – Light steers ex Darwin to Indonesia</td>
<td>20-May</td>
<td>Ac/kg lwt</td>
<td>320</td>
<td>320</td>
<td>0%</td>
<td>●</td>
<td>280 14% ↑</td>
</tr>
<tr>
<td>Live sheep – Live wether (Muchea WA saleyard) to Middle East</td>
<td>29-May</td>
<td>$/head</td>
<td>136</td>
<td>108</td>
<td>26%</td>
<td>↑</td>
<td>na na</td>
</tr>
<tr>
<td>Indicator</td>
<td>Week ended</td>
<td>Unit</td>
<td>Latest price</td>
<td>Price week prior</td>
<td>Weekly change</td>
<td>Price 12 months prior</td>
<td>Year on year change</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>-------</td>
<td>--------------</td>
<td>------------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Dairy – Whole milk powder</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>3,143</td>
<td>3,312</td>
<td>-5%</td>
<td>2,205</td>
<td>43%</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>2,156</td>
<td>1,998</td>
<td>8%</td>
<td>1,867</td>
<td>15%</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>4,285</td>
<td>3,726</td>
<td>15%</td>
<td>2,669</td>
<td>61%</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>06-Jun</td>
<td>US$/t</td>
<td>6,631</td>
<td>6,631</td>
<td>0%</td>
<td>3,444</td>
<td>93%</td>
</tr>
</tbody>
</table>

* 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 6 June 2017
  
- **World coarse grains indicator price**
  - US corn No. 2, fob Gulf
  - Week ended 7 June 2017

- **World carola indicator price**
  - Europe fob Hamburg
  - Week ended 6 June 2017

- **World cotton indicator price**
  - Cotlook ‘A’ index
  - Week ended 7 June 2017
3.3. Global Dairy Trade (GDT) weighted average prices

- Whole milk powder price
  - 6 June 2017

- Skim milk powder price
  - 6 June 2017

- Cheddar cheese price
  - 6 June 2017

- Anhydrous milk fat price
  - 6 June 2017
3.4. Selected domestic crop indicator prices

Grain sorghum indicator price
Sydney, NSW
Week ended 7 June 2017

Feed barley indicator price
Sydney, NSW
Week ended 10 May 2017

Feed wheat indicator price
General Purpose, Sydney, NSW
Week ended 7 June 2017

Milling wheat indicator price
ASW1, track quote, Port Adelaide, SA
Week ended 6 June 2017
Canola indicator price
Portland, Victoria
Week ended 5 June 2017
3.5. Selected domestic livestock indicator prices

Eastern Young Cattle Indicator
Week ended 1 June 2017

Eastern States Trade Lamb Indicator
Week ended 1 June 2017

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

Pig indicator price Eastern Seaboard
(60.1–75 kg)
Week ended 26 May 2017
3.6. Movements in selected fruit and vegetable prices – week ended 3 June 2017

Weekly wholesale prices for blueberry, pineapple (smoothleaf), watermelon (seedless) & banana (cavendish)

Weekly wholesale prices for kiwifruit (hayward), strawberry, apple (royal gala) & avocado (hass)

Weekly wholesale prices for onion (brown), cauliflower, potato (white, brushed) & tomato (field gourmet)

Weekly wholesale prices for broccoli, lettuce (iceberg), pumpkin (grey bulk) & bean (round stringless)
4. Data attribution

Climate
Bureau of Meteorology

Water
New South Wales
Queensland
- Sunwater: www.sunwater.com.au
- Seqwater: http://seqwater.com.au
South Australia
- South Australian Department of Environment, Water and Natural Resources: www.environment.sa.gov.au
Victoria
- Goulburn–Murray Water: www.g-mwater.com.au

Commodities
Fruit and vegetables
- Datafresh: www.freshstate.com.au
Pigs
- Australian Pork Limited: www.australianpork.com.au
Canola
- Weekly Times: hardcopy
Dairy
World wheat, canola
- International Grains Council
World coarse grains
- United States Department of Agriculture
World cotton
- Cotlook: www.cotlook.com/
World sugar
- New York Stock Exchange - Intercontinental Exchange
Wool
Milling wheat
- ProFarmer
Domestic wheat, barley, sorghum
- The Land: hardcopy or online at www.theland.farmonline.com.au/markets
Domestic canola
- The Weekly Times: hardcopy
Cattle, beef, mutton, lamb, goat and live export