Summary of key issues

- During the week ending 24 May 2017 rainfall was recorded across south-eastern, south-western and in parts of north-eastern Australia.

- The widespread rainfall will assist recently planted winter grains and oilseeds after a dry start to the month. Cropping regions in western Victoria, southern New South Wales and eastern South Australia have now recorded close to their average monthly rainfall for May.

- During the week ending 23 May 2017 maximum temperatures were generally average to above average across much of the country. Minimum temperatures were between 4°C and 6°C below average in parts of Western Australia and between 4°C and 6°C above average in central Queensland and northern New South Wales.

- The rainfall outlook for June to August 2017 indicates that below average rainfall is more likely across southern and western parts of the country, with an increased chance of above average rainfall in the Top End of the Northern Territory and eastern Tasmania.

- The forecast for the next eight days indicates that little to no rainfall is expected across most of mainland Australia. Totals exceeding 25 millimetres are forecast for southern and eastern Victoria, across northern and western Tasmania, and in isolated parts of north-eastern Queensland.

- While there is still a chance of El Niño development later in the year, almost all international climate models indicate less warming of the tropical Pacific Ocean compared to their previous outlooks.

- Water storage levels in the Murray–Darling Basin (MDB) increased by 65 gigalitres (GL) during the week ending 25 May 2017 to 15,281 GL and are at 68 per cent of total capacity.

- Water outlooks were released for all major catchments in the southern Murray-Darling Basin, indicating high amounts of likely carryover and reasonable starting allocations for 2017–18.

- Water market prices stabilised and remained low in the week to 25 May. Trade in the NSW southern connected system closes on 31 May.

- The US Department of Agriculture crop progress report estimates 52 per cent of the 2017–18 US winter wheat crop is in good or excellent condition, 33 per cent in fair condition, and 15 per cent in poor or very poor condition.
1. Climate

1.1. Rainfall this week

During the week ending 24 May 2017 rainfall was recorded in south-eastern, south-western and in parts of north-eastern Australia. Coastal and inland parts of northern Queensland recorded rainfall totals in excess of 200 millimetres, including the highest recorded weekly total of 252 millimetres at Alva Beach on Queensland’s central coast.

During the week a low pressure system and associated trough moved from west to east across the country. Rainfall totals exceeding 25 millimetres were recorded across most of New South Wales, western Victoria, southern Queensland, eastern South Australia, south-western Western Australia and Tasmania.

The widespread rainfall will assist recently planted winter grains and oilseeds after a dry start to the month. Cropping regions in western Victoria, southern New South Wales and far eastern South Australia have now recorded close to their average monthly rainfall for May. However, monthly rainfall remains well below average in cropping regions in northern New South Wales, eastern Victoria, western South Australia, and most of Western Australia.

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 24 May 2017

![Rainfall Map](image-url)
1.2. Temperature anomalies this week

During the week ending 23 May 2017 maximum temperatures were generally average to above average across much of the country. Isolated parts of central Queensland and the Northern Territory recorded maximum temperatures between 4°C and 6°C above average. Minimum temperatures were between 4°C and 6°C below average in parts of Western Australia and between 4°C and 6°C above average in central Queensland and northern New South Wales.

Maximum temperature anomalies for the week ending 23 May 2017

Minimum temperature anomalies for the week ending 23 May 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. National Climate Outlook to the end of August

The rainfall and temperature outlooks presented below show the likelihood, represented as a percentage, of experiencing wetter or drier (and warmer or cooler) than median climatic conditions for the given outlook periods. Climate outlooks are generated by the Predictive Climate Ocean Atmosphere Model for Australia (POAMA), a dynamical (physics-based) climate model developed by the Bureau of Meteorology and CSIRO Marine and Atmospheric research division.

For further information, go to http://www.bom.gov.au/climate/ahead/about/

This outlook is influenced by warmer than average tropical Pacific sea surface temperatures and a cooler eastern Indian Ocean.

The El Niño–Southern Oscillation (ENSO) remains neutral, but sea surface temperatures in the tropical Pacific Ocean are warmer than average. The majority of international climate models still indicate El Niño may develop later this year. Caution should be exercised as models have lower accuracy at this time of year. El Niño typically biases Australia's climate towards a drier than average winter-spring, and warmer daytime temperatures in the south. Some El Niño-like effects may still be felt even if an event doesn't fully develop.

The outlook is also being influenced by forecast higher than average air pressure for southern parts of Australia. This higher than average air pressure would mean that fewer cold fronts and low pressure systems are likely to cross southern Australia during winter.

Rainfall during June 2017 is more likely to be below average across most of western and southern Australia. Tropical northern Australia and eastern Tasmania are more likely to be wetter than average. The remainder of the country has roughly equal chances of a drier or wetter than average June (Bureau of Meteorology ‘National Climate Outlook’, 25 May 2017).

**Chance of exceeding the median rainfall June 2017**
The rainfall outlook for June to August 2017 indicates that below average rainfall is more likely across most of southern and western Australia, while the Top End of the Northern Territory and eastern Tasmania have an increased chance of exceeding average rainfall. It should be noted that northern Australia has now entered the dry season, and median rainfall at this time of year is very low. Only a small amount of rainfall—which could come from a single rain event—would be needed to exceed the median. The remainder of the country has equal chances of above or below average rainfall during this period (Bureau of Meteorology ‘National Climate Outlook’, 25 May 2017).
The temperature outlook for June to August 2017 indicates an increased chance of above average maximum temperatures across southern, western and far northern Australia. Most of Queensland, northern Western Australia and the Northern Territory show no strong tendency toward warmer or cooler temperatures. Minimum temperatures are more likely to be close to average for much of Australia, except for parts of south-eastern Australia, Tasmania, Western Australia, and far northern Queensland where there is an increased chance of exceeding the median minimum temperature (Bureau of Meteorology ‘National Climate Outlook’, 25 May 2017).

**Chance of exceeding the median maximum temperature June to August 2017**

![Map showing chance of exceeding the median maximum temperature](image1)

**Chance of exceeding the median minimum temperature June to August 2017**

![Map showing chance of exceeding the median minimum temperature](image2)
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. Totals exceeding 25 millimetres are forecast for southern and eastern Victoria, across northern and western Tasmania, and in isolated parts of north-eastern Queensland. 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 25 May to 1 June 2017

1.5. El Niño–Southern Oscillation Update

While there is still a chance of El Niño development later in the year, almost all international climate models indicate less warming of the tropical Pacific Ocean compared to their previous outlooks. This suggests that if an El Niño event develops, it may be weak. The Bureau of Meteorology’s ENSO Outlook remains at El Niño WATCH.

The latest weekly Indian Ocean Dipole (IOD) index value is +0.3°C. A positive IOD event is declared when index values are sustained at +0.4°C for at least eight weeks. Four out of six models surveyed by the Bureau of Meteorology indicate a positive IOD even is likely during winter and early spring (Bureau of Meteorology ‘Climate Model Summary’, 23 May 2017).
2. Water

2.1. Water availability

Water storage levels in the Murray–Darling Basin (MDB) increased during the week ending 25 May 2017 by 65 gigalitres (GL) to 15,281 GL and are at 68 per cent of total capacity. This is 37 percentage points or 8,277 GL more than at the same time last year.

Information on irrigation water available in the Murray–Darling Basin from 1 January 2001 to 25 May 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 markets

Allocation prices in the southern Murray-Darling Basin remained stable in the week until 25 May 2017 in most systems, however across the whole southern system the average price fell to $19.68. This contrasts with an average price of $41.41 in March and $31.97 in April across the whole southern MDB. In the Murrumbidgee the average price remained $5.01.

Trade in the NSW southern connected system closes on 31 May.

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 25 May 2017.

<table>
<thead>
<tr>
<th>Allocation trade prices, southern Murray-Darling Basin (price per ML)</th>
<th>Goulburn</th>
<th>South Australia</th>
<th>Murrumbidgee</th>
<th>Victoria Murray</th>
<th>NSW Murray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current week: 19/05/17 - 25/05/17</td>
<td>$23.40</td>
<td>$26.29</td>
<td>$5.00</td>
<td>$25.31</td>
<td>$19.68</td>
</tr>
<tr>
<td>Last week: 12/05/17 - 18/05/17</td>
<td>$29.60</td>
<td>$26.25</td>
<td>$5.01</td>
<td>$27.97</td>
<td>$27.43</td>
</tr>
<tr>
<td>April 2017</td>
<td>$42.38</td>
<td>$36.52</td>
<td>$11.38</td>
<td>$42.88</td>
<td>$35.65</td>
</tr>
<tr>
<td>April 2016</td>
<td>$248.09</td>
<td>$242.75</td>
<td>$207.77</td>
<td>$247.26</td>
<td>$237.31</td>
</tr>
</tbody>
</table>
3. Commodities

3.1. Market focus

World wheat

The US Department of Agriculture crop progress report estimates 52 per cent of the US winter wheat crop is in good or excellent condition for the week ending 21 May 2017. While lower than at this time last year (62 per cent), it is an improvement on the previous week. In Kansas, the largest hard red winter growing state, a larger proportion of the wheat crop is in poor or very poor condition (24 per cent) relative to all 18 wheat producing states (15 per cent).

**US winter wheat crop condition, Kansas and all 18 states**

Source: United States Department of Agriculture National Agricultural Statistics Service
<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>24-May</td>
<td>US$/A$</td>
<td>0.75</td>
<td>0.74</td>
<td>1% ↑</td>
<td>0.72</td>
<td>4% ↑</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>23-May</td>
<td>US$/t</td>
<td>200</td>
<td>199</td>
<td>&lt;1% ↑</td>
<td>193</td>
<td>4% ↑</td>
</tr>
<tr>
<td>Coarse Grains – US no. 2 yellow corn, fob Gulf</td>
<td>24-May</td>
<td>US$/t</td>
<td>160</td>
<td>158</td>
<td>1% ↑</td>
<td>172</td>
<td>-7% ↓</td>
</tr>
<tr>
<td>Canola – Rapeseed, Europe, fob Hamburg</td>
<td>23-May</td>
<td>US$/t</td>
<td>431</td>
<td>430</td>
<td>&lt;1% ↑</td>
<td>422</td>
<td>2% ↑</td>
</tr>
<tr>
<td>Cotton – Cotlook 'A' Index</td>
<td>24-May</td>
<td>USc/lb</td>
<td>88.5</td>
<td>90.6</td>
<td>-2% ↓</td>
<td>70.2</td>
<td>26% ↑</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>24-May</td>
<td>USc/lb</td>
<td>16.1</td>
<td>15.8</td>
<td>2% ↑</td>
<td>16.9</td>
<td>-5% ↓</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>18-May</td>
<td>Ac/kg clean</td>
<td>1,522</td>
<td>1,534</td>
<td>&lt;1% ↓</td>
<td>1,291</td>
<td>18% ↑</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>19-May</td>
<td>Ac/kg clean</td>
<td>1,535</td>
<td>1,527</td>
<td>&lt;1% ↑</td>
<td>1,383</td>
<td>11% ↑</td>
</tr>
<tr>
<td><strong>Selected domestic crop indicator prices</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milling Wheat – ASW1, track quote, Port Adelaide, SA</td>
<td>23-May</td>
<td>A$/t</td>
<td>194</td>
<td>192</td>
<td>1% ↑</td>
<td>251</td>
<td>-23% ↓</td>
</tr>
<tr>
<td>Feed Wheat – General purpose, Sydney, NSW</td>
<td>24-May</td>
<td>A$/t</td>
<td>235</td>
<td>230</td>
<td>2% ↑</td>
<td>265</td>
<td>-11% ↓</td>
</tr>
<tr>
<td>Feed Barley – Sydney, NSW</td>
<td>24-May</td>
<td>A$/t</td>
<td>211</td>
<td>170</td>
<td>24% ↑</td>
<td>227</td>
<td>-7% ↓</td>
</tr>
<tr>
<td>Canola – Portland, Vic.</td>
<td>22-May</td>
<td>A$/t</td>
<td>520</td>
<td>520</td>
<td>0% ●</td>
<td>526</td>
<td>-1% ↓</td>
</tr>
<tr>
<td>Grain Sorghum – Sydney, NSW</td>
<td>24-May</td>
<td>A$/t</td>
<td>270</td>
<td>264</td>
<td>2% ↑</td>
<td>253</td>
<td>7% ↑</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>12-May</td>
<td>Ac/kg cwt</td>
<td>636</td>
<td>652</td>
<td>-2% ↓</td>
<td>563</td>
<td>13% ↑</td>
</tr>
<tr>
<td>Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic</td>
<td>19-May</td>
<td>Ac/kg cwt</td>
<td>544</td>
<td>530</td>
<td>3% ↑</td>
<td>359</td>
<td>52% ↑</td>
</tr>
<tr>
<td>Lamb – Eastern States Trade Lamb Indicator</td>
<td>25-May</td>
<td>Ac/kg cwt</td>
<td>651</td>
<td>641</td>
<td>2% ↑</td>
<td>586</td>
<td>11% ↑</td>
</tr>
<tr>
<td>Pig – Eastern Seaboard (60.1–75 kg), average of buyers &amp; sellers</td>
<td>12-May</td>
<td>Ac/kg cwt</td>
<td>302</td>
<td>300</td>
<td>&lt;1% ↑</td>
<td>386</td>
<td>-22% ↓</td>
</tr>
<tr>
<td>Goat – Eastern States (12.1–16 kg)</td>
<td>22-May</td>
<td>Ac/kg cwt</td>
<td>656</td>
<td>656</td>
<td>0% ●</td>
<td>552</td>
<td>19% ↑</td>
</tr>
<tr>
<td>Live cattle – Light steers ex Darwin to Indonesia</td>
<td>13-May</td>
<td>Ac/kg lwt</td>
<td>320</td>
<td>330</td>
<td>-3% ↓</td>
<td>275</td>
<td>16% ↑</td>
</tr>
<tr>
<td>Live sheep – Live wether (Muchea WA saleyard) to Middle East</td>
<td>15-May</td>
<td>$/head</td>
<td>116</td>
<td>110</td>
<td>5% ↑</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Indicator</td>
<td>Week ended</td>
<td>Unit</td>
<td>Latest price</td>
<td>Price week prior</td>
<td>Weekly change</td>
<td>Price 12 months prior</td>
<td>Year on year change</td>
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</tr>
<tr>
<td><strong>Global Dairy Trade (GDT) weighted average prices</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy - Whole milk powder</td>
<td>16-May</td>
<td>US$/t</td>
<td>3,312</td>
<td>3,233</td>
<td>2%</td>
<td>2,252</td>
<td>47%</td>
</tr>
<tr>
<td>Dairy - Skim milk powder</td>
<td>16-May</td>
<td>US$/t</td>
<td>1,998</td>
<td>1,982</td>
<td>&lt;1%</td>
<td>1,658</td>
<td>21%</td>
</tr>
<tr>
<td>Dairy - Cheddar cheese</td>
<td>16-May</td>
<td>US$/t</td>
<td>3,726</td>
<td>3,666</td>
<td>2%</td>
<td>2,693</td>
<td>38%</td>
</tr>
<tr>
<td>Dairy - Anhydrous milk fat</td>
<td>16-May</td>
<td>US$/t</td>
<td>6,631</td>
<td>6,185</td>
<td>7%</td>
<td>3,340</td>
<td>99%</td>
</tr>
</tbody>
</table>

<sup>a</sup> 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 23 May 2017

- World coarse grains indicator price
  US corn No. 2, fob Gulf
  Week ended 24 May 2017

- World canola indicator price
  Europe fob Hamburg
  Week ended 23 May 2017

- World cotton indicator price
  Cotlook 'A' index
  Week ended 24 May 2017
3.3. Global Dairy Trade (GDT) weighted average prices

- **Whole milk powder price**
  - 16 May 2017
  - Graph showing trends from Jan to Dec 2017

- **Skim milk powder price**
  - 16 May 2017
  - Graph showing trends from Jan to Dec 2017

- **Cheddar cheese price**
  - 16 May 2017
  - Graph showing trends from Jan to Dec 2017

- **Anhydrous milk fat price**
  - 16 May 2017
  - Graph showing trends from Jan to Dec 2017
3.4. Selected domestic crop indicator prices

Grain sorghum indicator price
Sydney, NSW
Week ended 24 May 2017

Feed barley indicator price
Sydney, NSW
Week ended 24 May 2017

Feed wheat indicator price
General Purpose, Sydney, NSW
Week ended 24 May 2017

Milling wheat indicator price
ASW1, track quote, Port Adelaide, SA
Week ended 23 May 2017
3.5. Selected domestic livestock indicator prices

- **Eastern Young Cattle Indicator**
  Week ended 12 May 2017

- **Eastern States Trade Lamb Indicator**
  Week ended 25 May 2017

- **Mutton indicator price in Victoria**
  (18–24 kg fat score 2–3)
  Week ended 19 May 2017

- **Pig indicator price Eastern Seaboard**
  (60.1–75 kg)
  Week ended 12 May 2017
3.6. Movements in selected fruit and vegetable prices – week ended 25 May 2017
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