Summary of key issues

- During the week ending 15 November 2017 rainfall was mainly concentrated in central and northern Australia, although totals exceeding 5 millimetres were recorded in parts of all states and territories except Tasmania.

- For the week ending 14 November 2017 maximum temperatures were 2°C to 6°C above average across southern and south-western Australia and below average (-2°C to -4°C) in parts of eastern and central Australia.

- The mid-month climate outlook for December 2017 to February 2018 indicates that there are roughly equal chances of a wetter or drier three months for most of Australia except north-eastern New South Wales and around the Gulf of Carpentaria—where rainfall totals for the next three months are more likely to be lower than the median.

- A low pressure trough and upper level low pressure systems are expected to generate widespread rainfall across eastern and northern Australia during the next eight days.

- Water storage levels in the Murray-Darling Basin (MDB) decreased during the week ending 16 November 2017 by 195 gigalitres (GL) to 15,848 GL and are at 70 per cent of total capacity. This is 15 percentage points or 3,351 GL less than at the same time last year.

- Allocation prices in the southern Murray-Darling Basin declined in the week ending 16 November 2017 to $117 per ML. This is a decrease of $15 from the same time last week.
1. Climate

1.1. Rainfall this week

During the week ending 15 November 2017 rainfall was mainly concentrated in central and northern Australia, although totals exceeding 5 millimetres were recorded in parts of all states and territories except Tasmania. Totals between 10 and 50 millimetres were recorded in central and coastal parts of Queensland, north-eastern and alpine areas of New South Wales and across most of central South Australia. Similar totals were recorded in south-western, central and northern Western Australia and across most of the Northern Territory. Higher totals between 50 and 100 millimetres were recorded in parts of South Australia, the Northern Territory and in north-eastern Queensland. The highest recorded weekly total was 202 millimetres at Mount Sophia, south of Cairns in Queensland. Little to no rainfall was recorded in Tasmania, and much of Victoria, New South Wales and southern Queensland.

Rainfall for the week ending 15 November 2017
1.2. Temperature anomalies this week

During the week ending 14 November 2017 maximum temperatures were 2°C to 6°C above average across much of southern and south-western Australia. They were 6°C to 10°C above average in western Victoria and eastern South Australia. Maximum temperatures were below average (-2°C to -4°C) in parts of eastern and central Australia. Minimum temperatures followed a similar pattern, 2°C to 4°C above average in the south and -2°C to -4°C below average in the east and centre of the country.
1.3. Mid-month National Climate Outlook

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/

While the current ENSO Outlook is at La Niña WATCH, Australia’s major drivers remain at neutral levels. Most models suggest further cooling of the tropical eastern Pacific, reaching or exceeding La Niña thresholds during summer. However, models indicate that warming of the western Pacific, eastern Indian Ocean and seas around northern Australia that typically occurs during La Niña is unlikely. Given the opposing rainfall signals from the ocean patterns around Australia, current outlooks show no strong tendency toward either a wetter or drier summer.

December 2017 rainfall is more likely to be below the median in coastal parts of Western Australia and around the Gulf of Carpentaria. For the remainder of Australia there are roughly equal chances of above or below median rainfall during December 2017 (Bureau of Meteorology ‘National Climate Outlook’, 16 November 2017).

**Chance of exceeding the median rainfall December 2017**
The rainfall outlook for December 2017 to February 2018 indicates that there are roughly equal chances of wetter or drier three months for most of Australia except north-eastern New South Wales and around the Gulf of Carpentaria—where rainfall totals for the next three months are more likely to be lower than the median (Bureau of Meteorology ‘National Climate Outlook’, 16 November 2017).
The temperature outlook for December 2017 to February 2018 indicates that maximum and minimum temperatures are likely to be warmer than average for most of Australia except for parts of Western Australia, where there are roughly equal chances of warmer or cooler than average maximum and minimum temperatures. The chance of exceeding the maximum and minimum temperature is highest in southern Tasmania and far northern Australia (Bureau of Meteorology ‘National Climate Outlook’, 16 November 2017).

**Chance of exceeding the median maximum temperature December 2017 to February 2018**

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

**Chance of exceeding the median minimum temperature December 2017 to February 2018**

![Map showing the chance of exceeding the median minimum temperature](image)
1.4. **Rainfall forecast for the next eight days**

Widespread rainfall is forecast across eastern and northern Australia during the next eight days. A slow moving low pressure trough and upper level low pressure system are expected to generate rainfall totals between 10 and 50 millimetres in eastern South Australia, Victoria, New South Wales, Queensland and Tasmania. Similar totals are expected in parts of south-eastern and northern Western Australia and northern parts of the Northern Territory. Higher totals (between 50 and 100 millimetres) are forecast in western Victoria, central and southern Queensland, northern parts of the Northern Territory, and far northern parts of Western Australia.

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 16 to 23 November 2017**
2. Water

2.1. Water availability

Water storage levels in the Murray-Darling Basin (MDB) decreased during the week ending 16 November 2017 by 195 gigalitres (GL) to 15,848 GL and are at 70 per cent of total capacity. This is 15 percentage points or 3,351 GL less than at the same time last year.

Information on water available in dams used for irrigation the Murray–Darling Basin from 1 January 2001 to 16 November 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

On 15 November 2017 NSW Department of Primary Industries - Water announced allocation increases of:

- 3% for NSW Murray general security to 35%.

On 15 November 2017 the Resource Manager for Northern Victoria announced seasonal determination increases of:

- 20% for Victoria Broken low reliability to 20%
- 3% for Victoria Campaspe low reliability to 33%
- 1% for Victoria Goulburn high reliability to 94%
- 1% for Victoria Loddon high reliability to 94%.

The current water allocations for the 2017–18 water trading season for licence holders in New South Wales, Victoria and South Australia water systems are summarised in the following table and charts.

| Water allocations in the Murray–Darling Basin (NSW, Victoria and South Australia) |
|------------------------------|-----------------|-----------------|-----------------|-----------------|
| Allocations at  | 16 November 2017 | 7 November 2017 |     |          |
| New South Wales | General security | High security | General security | High security |
| NSW Murray | 35% | 97% | 32% | 97% |
| NSW Murrumbidgee | 33% | 95% | 33% | 95% |
| NSW Lower Darling | 100% | 100% | 100% | 100% |
| NSW Macquarie and Cudgegong | 38% | 100% | 38% | 100% |
| NSW Hunter | 100% | 100% | 100% | 100% |
| NSW Lachlan | 2% | 100% | 2% | 100% |
| NSW Lower Namoi | 7% | 100% | 7% | 100% |
| NSW Upper Namoi | 100% | 100% | 100% | 100% |
| NSW Gwydir | 16% | 100% | 16% | 100% |
| NSW Border Rivers | 100%(a)/11.1%(b) | 100% | 100%(a)/11.1%(b) | 100% |
| NSW Peel | 100% | 100% | 100% | 100% |
| Victoria | Low reliability | High reliability | Low reliability | High reliability |
| Victoria Murray | 0% | 100% | 0% | 100% |
| Victoria Goulburn | 0% | 94% | 0% | 93% |
| Victoria Campaspe | 33% | 100% | 30% | 100% |
| Victoria Loddon | 0% | 94% | 0% | 93% |
| Victoria Bullarook | 100% | 100% | 100% | 100% |
| Victoria Broken | 20% | 100% | 0% | 100% |
| South Australia | Class 3a/3b | Class 3a/3b |
| South Australia Murray | 100% | 100% |

(a) General Security A class. (b) General Security B class
Select water allocation percentages in the southern Murray–Darling Basin
2.3. Water markets

Allocation prices in the southern Murray-Darling Basin declined in the week ending 16 November 2017 to $117 per ML. This is a decrease of $15 from the same time last week. This contrasts with an average price of $138 in October across the whole southern MDB, and $78 during the same time last year.

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 16 November 2017. Trade activity is shown as colour density.

| Allocation trade prices, southern Murray–Darling Basin trade zones (price per ML) |
|---------------------------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|
| Current week: 10/11/17 - 16/11/17 | Southern MDB $116.97 | Victoria Goulburn $96.54 | SA Murray $137.26 | NSW Murrumbidgee $108.93 | Victoria Murray $137.28 | NSW Murray $136.83 |
| Last week: 03/11/17 - 09/11/17  | Southern MDB $131.81 | Victoria Goulburn $98.22 | NA | NSW Murrumbidgee $147.70 | Victoria Murray $133.04 | NSW Murray $135.54 |
| October 2017                    | Southern MDB $137.89 | Victoria Goulburn $114.22 | SA Murray $176.71 | NSW Murrumbidgee $136.59 | Victoria Murray $143.94 | NSW Murray $148.21 |
| October 2016                    | Southern MDB $77.61  | Victoria Goulburn $88.96 | SA Murray $76.51  | NSW Murrumbidgee $50.38  | Victoria Murray $103.94 | NSW Murray $76.94  |
### 3. Commodities

<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>15-Nov</td>
<td>US$/AUD</td>
<td>0.76</td>
<td>0.77</td>
<td>-1%</td>
<td>0.76</td>
<td>0% ●</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>14-Nov</td>
<td>US$/t</td>
<td>223</td>
<td>220</td>
<td>1%</td>
<td>190</td>
<td>17% ▲</td>
</tr>
<tr>
<td>Coarse Grains – US no. 2 yellow corn, fob Gulf</td>
<td>15-Nov</td>
<td>US$/t</td>
<td>148</td>
<td>151</td>
<td>-2%</td>
<td>149</td>
<td>&lt;1% ▼</td>
</tr>
<tr>
<td>Canola – Rapeseed, Europe, fob Hamburg</td>
<td>14-Nov</td>
<td>US$/t</td>
<td>438</td>
<td>436</td>
<td>&lt;1%</td>
<td>426</td>
<td>3% ▲</td>
</tr>
<tr>
<td>Cotton – Cotlook 'A' Index</td>
<td>15-Nov</td>
<td>USc/lb</td>
<td>79.6</td>
<td>79.4</td>
<td>&lt;1%</td>
<td>78.0</td>
<td>2% ▲</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>15-Nov</td>
<td>USc/lb</td>
<td>15.0</td>
<td>14.6</td>
<td>3%</td>
<td>21.3</td>
<td>-30% ▼</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>09-Nov</td>
<td>Ac/kg clean</td>
<td>1,681</td>
<td>1,623</td>
<td>4%</td>
<td>1,290</td>
<td>30% ▲</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>10-Nov</td>
<td>Ac/kg clean</td>
<td>1,722</td>
<td>1,674</td>
<td>3%</td>
<td>1,363</td>
<td>26% ▲</td>
</tr>
</tbody>
</table>

| **Selected domestic crop indicator prices**                                |            |              |              |                  |               |                       |                     |
| Milling Wheat – ASW1, track quote, Port Adelaide, SA                       | 14-Nov     | A$/t         | 232          | 231              | <1%           | 203                   | 14% ▲               |
| Feed Wheat – General purpose, Sydney, NSW                                  | 15-Nov     | A$/t         | 253          | 258              | -2%           | 249                   | 2% ▲                |
| Feed Barley – Sydney, NSW                                                 | 15-Nov     | A$/t         | 246          | 251              | -2%           | 176                   | 40% ▲               |
| Canola – Portland, Vic.                                                    | 13-Nov     | A$/t         | 544          | 536              | 1%            | 534                   | 2% ▲                |
| Grain Sorghum – Sydney, NSW                                                | 03-Nov     | A$/t         | 309          | 304              | 2%            | 233                   | 33% ▲               |

| **Selected domestic livestock indicator prices**                            |            |              |              |                  |               |                       |                     |
| Beef – Eastern Young Cattle Indicator                                      | 09-Nov     | Ac/kg cwt    | 579          | 575              | <1%           | 659                   | -12% ▼              |
| Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic                   | 17-Nov     | Ac/kg cwt    | 459          | 451              | 2%            | 394                   | 16% ▲               |
| Lamb – Eastern States Trade Lamb Indicator                                 | 02-Nov     | Ac/kg cwt    | 620          | 623              | <1%           | 549                   | 13% ▲               |
| Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers          | 03-Nov     | Ac/kg cwt    | 276          | 276              | 0%            | 378                   | -27% ▼              |
| Goat – Eastern States (12.1–16 kg)                                        | 13-Nov     | Ac/kg cwt    | 486          | 491              | -1%           | 589                   | -17% ▼              |
| Live cattle – Light steers ex Darwin to Indonesia                          | 11-Nov     | Ac/kg lwt    | 330          | 320              | 3%            | na                    | na                  |
| Live sheep – Live wether (Muchea WA saleryard) to Middle East             | 13-Nov     | $/head       | 100          | 105              | -5%           | 92                    | 9% ▲                |
## Global Dairy Trade (GDT) weighted average prices

<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>Dairy – Whole milk powder</td>
<td>07-Nov</td>
<td>US$/t</td>
<td>2,852</td>
<td>3,014</td>
<td>-5% ▼</td>
<td>3,317</td>
<td>-14% ▼</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>07-Nov</td>
<td>US$/t</td>
<td>1,818</td>
<td>1,797</td>
<td>1% ▲</td>
<td>2,329</td>
<td>-22% ▼</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>07-Nov</td>
<td>US$/t</td>
<td>4,001</td>
<td>4,107</td>
<td>-3% ▼</td>
<td>3,332</td>
<td>20% ▲</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>07-Nov</td>
<td>US$/t</td>
<td>6,894</td>
<td>6,841</td>
<td>&lt;1% ▲</td>
<td>5,146</td>
<td>34% ▲</td>
</tr>
</tbody>
</table>

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

World wheat indicator price
US No. 2, hard red winter wheat, fob Gulf
Week ended 14 November 2017

World coarse grains indicator price
US corn No. 2, fob Gulf
Week ended 15 November 2017

World canola indicator price
Europe fob Hamburg
Week ended 14 November 2017

World cotton indicator price
Cotlook ‘A’ index
Week ended 15 November 2017
2.5. Global Dairy Trade (GDT) weighted average prices

![Graphs showing the price trends of whole milk powder, skim milk powder, cheddar cheese, and anhydrous milk fat from January to December 2017, with data from 2015, 2016, and 2017.]
2.6. Selected domestic crop indicator prices

Grain sorghum indicator price
Sydney, NSW
Week ended 3 November 2017

Feed barley indicator price
Sydney, NSW
Week ended 15 November 2017

Feed wheat indicator price
General Purpose, Sydney, NSW
Week ended 15 November 2017

Milling wheat indicator price
ASW1, track quote, Port Adelaide, SA
Week ended 14 November 2017
2.7. Selected domestic livestock indicator prices

- **Eastern Young Cattle Indicator**
  - Week ended 9 November 2017

- **Mutton indicator price in Victoria**
  - (18–24 kg fat score 2–3)
  - Week ended 17 November 2017

- **Eastern States Trade Lamb Indicator**
  - Week ended 2 November 2017

- **Pig indicator price Eastern Seaboard**
  - (60.1–75 kg)
  - Week ended 3 November 2017
2.8. Selected fruit and vegetable prices – week ended 11 November 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)
3. 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