Summary of key issues

- During the week ending 23 October 2019 rainfall was restricted to parts of western and eastern Australia.

- Across cropping regions, rainfall totals of between 10 to 50 millimetres were recorded across isolated areas of eastern Queensland. Rainfall totals of between 1 to 10 millimetres were recorded across parts of eastern and southern New South Wales, Victoria, eastern Queensland and eastern South Australia.

- Most climate models indicate that a strongly positive Indian Ocean Dipole (IOD) is expected to remain the dominant driver of climatic conditions in Australia during spring. A positive IOD at this time of year typically brings drier conditions to much of southern and central Australia.

- A prolonged negative Southern Annular Mode (SAM) event is also forecast to persist during late October and early November. This negative SAM is likely to intensify dry and warm conditions across eastern Australia and bring wetter than average conditions to western Tasmania during spring.

- The rainfall outlook for November to January 2019 indicates that a drier than average three months is more likely across parts of southern, central and eastern Australia.

- Over the next eight days, limited rainfall is expected over parts of northern and south-eastern Australia.

- Across Australia’s cropping regions, the 8-day rainfall forecast indicates that falls of between 1 and 5 millimetres are expected across parts of northern and eastern New South Wales, southern Victoria, Queensland and southern Western Australia. These expected low rainfall totals are likely to be of little benefit to production prospects following hot and dry spring conditions in many regions.

- Water storage levels in the Murray-Darling Basin (MDB) decreased between 16 October and 22 October 2019 by 49 gigalitres (GL). Current volume of water held in storage is 10,055 GL which represents 40 per cent of total capacity. This is 25 percentage points or 3,430 GL less than at the same time last year.

- Allocation prices in the Victorian Murray below the Barmah Choke decreased from $798 per ML on 7 October 2019 to $787 per ML on 14 October 2019. More recently in the Victorian Murray below the Barmah Choke prices have increased significantly up to $950 per ML on the 23 October 2019.
1. Climate

1.1. Rainfall this week

During the week ending 23 October 2019 rainfall was restricted to parts of western and eastern Australia.

Across cropping regions, rainfall totals of between 10 to 50 millimetres were recorded across isolated areas of eastern Queensland. Rainfall totals of between 1 to 10 millimetres were recorded across parts of eastern and southern New South Wales, Victoria, eastern Queensland and eastern South Australia. Little to no rainfall was recorded across cropping regions Western Australia and remaining cropping regions in New South Wales, Queensland and South Australia.

Rainfall for the week ending 23 October 2019
1.2. Temperature anomalies this week

For the week ending 22 October 2019, maximum temperatures were 2°C to 6°C above average across large areas of western, northern and eastern Australia, and minimum temperatures were 2°C to 8°C above average across parts of eastern Queensland, and large areas of western and central Australia. In contrast, minimum temperatures were 2°C to 4°C below average across isolated areas of northern and south-eastern Australia. Average (-2°C to 2°C) minimum and maximum temperatures were recorded across the remainder of the country.

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 the average over the 1961 to 1990 reference period. For further information go to: http://www.bom.gov.au/jsp/awap/temp/index.jsp.
1.3. National Climate Outlook

The rainfall and temperature outlooks presented here 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. These climate outlooks are generated by ACCESS–S (Australian Community Climate Earth-System Simulator–Seasonal). ACCESS–S is the Bureau of Meteorology’s dynamical (physics-based) weather and climate model used for monthly, seasonal and longer-lead climate outlooks.

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

The El Niño-Southern Oscillation is currently neutral and expected to remain neutral until at least early 2019. The positive Indian Ocean Dipole (IOD) has continued to strengthen and most climate models suggest it will remain the dominant driver of climatic conditions in Australia until the end of spring. A positive IOD typically brings below average spring rainfall and warmer days to southern and central Australia. A prolonged negative Southern Annular Mode (SAM) event is also forecast to persist during late October and early November due to a predicted sudden stratospheric warming event. This negative SAM is likely to intensify dry and warm conditions across eastern Australia and bring wetter than average conditions to western Tasmania during spring.

The latest rainfall outlook released by the Bureau of Meteorology suggests that a drier than average November is more likely for most of the country. In contrast, a wetter than average November is more likely across parts of western Tasmania. Across parts of northern Western Australia, there is no strong shift towards a wetter or drier than average month (Bureau of Meteorology ‘National Climate Outlook’, 17 October 2019).

Chance of exceeding the median rainfall November 2019

Chance of exceeding the median rainfall for November 2019

Model: ACCESS-S1
Base period: 1990-2012
Model run: 14/10/2019
Issued: 17/10/2019
The Bureau of Meteorology’s climate outlooks are given as a probability (or chance) of exceeding a specified rainfall or temperature threshold. In the case of the Bureau’s rainfall outlook, it is represented as the chance of rainfall being above median, expressed as a percentage. While this probabilistic forecast indicates that the chance of exceeding median rainfall is quite low across parts of Australia, it does not mean that these areas will receive no rainfall during November to January 2019.

The rainfall outlook for November to January 2019 indicates that a drier than average three months is more likely across parts of southern, central and eastern Australia. In contrast, a wetter than average November to January is more likely for parts of the northwest of Western Australia. Across much of north-western and south-eastern Australia, there is no strong shift towards a wetter or drier than average three months (Bureau of Meteorology ‘National Climate Outlook’, 17 October 2019).

 Chance of exceeding the median rainfall November 2019 to January 2020

![Map of Australia showing the chance of exceeding the median rainfall for November 2019 to January 2020.](image)
The temperature outlook for November to January 2019 indicates that daytime temperatures are more likely to be warmer than average for much of the country. Night-time temperatures are also likely to be warmer than average for much of Australia, with the exception of parts of north-eastern Queensland and south-eastern Australia where the chances of warmer or cooler nights are roughly equal (Bureau of Meteorology ‘National Climate Outlook’, 17 October 2019).

**Chance of exceeding the median maximum temperature November 2019 to January 2020**

![Map showing the chance of exceeding the median maximum temperature for November 2019 to January 2020](image1)

**Chance of exceeding the median minimum temperature November 2019 to January 2020**

![Map showing the chance of exceeding the median minimum temperature for November 2019 to January 2020](image2)
1.4. Rainfall forecast for the next eight days

Over the next eight days, limited rainfall is expected over parts of northern and south-eastern Australia.

Rainfall totals of between 5 and 25 millimetres are forecast for isolated parts of southern Victoria. Higher rainfall totals up to 100 millimetres are forecast for parts of north-eastern Queensland, western Tasmania and the north of the Northern Territory.

In cropping regions, low expected rainfall totals of between 1 and 5 millimetres across parts of northern and eastern New South Wales, southern Victoria, Queensland and southern Western Australia are likely to be of little benefit to production prospects following hot and dry spring conditions in many regions. Little to no rainfall is expected across South Australia and remaining cropping regions in New South Wales, Victoria and Western Australia.

Total forecast rainfall (mm) for the period 24 October to 31 October 2019

©Commonwealth of Australia 2019, Australian Bureau of Meteorology

Issued: 24/10/2019

Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.
2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) decreased by 49 gigalitres (GL) between 16 October and 22 October 2019. The current volume of water held in storage is 10,055 GL, which represents 40% of total capacity. This is 25% or 3,430 GL less than at the same time last year.


Allocation prices in the Victorian Murray below the Barmah Choke decreased from $798 per ML on 7 October 2019 to $787 per ML on 14 October 2019. More recently in the Victorian Murray below the Barmah Choke prices have increased significantly up to $950 per ML on the 23 October 2019. Binding trade limits, maturing almond trees and dry seasonal conditions, may have left the catchments below the Barmah choke exposed to high water prices. Prices in other catchments in the southern Murray-Darling Basin remain lower (see table).

<table>
<thead>
<tr>
<th>Region</th>
<th>$/ML</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIC Murray Below</td>
<td>950</td>
</tr>
<tr>
<td>NSW Murray Above</td>
<td>620</td>
</tr>
<tr>
<td>VIC Goulburn-Broken</td>
<td>535</td>
</tr>
<tr>
<td>NSW Murrumbidgee</td>
<td>638</td>
</tr>
</tbody>
</table>

Surface water trade activity, Southern Murray–Darling Basin

The trades shown reflect estimated market activity and do not encompass all register trades. The price line reflects value weighted average prices for the entire southern Murray-Darling Basin up until 1 July 2019. The price line after 1 July 2019 reflects recorded transaction prices in the Victorian Murray (Below the Choke). Data shown is current at 24 October 2019, and encompasses water market activity until 23 October 2019. Data is sourced from the BOM water dashboard, or Ruralco Water for price data after 1 July 2019.

To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit http://www.agriculture.gov.au/abares/publications/weekly_update/weekly-update-241019
## 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>23-Oct</td>
<td>US$/A$</td>
<td>0.68</td>
<td>0.68</td>
<td>0% ●</td>
<td>0.71</td>
<td>-4% ↓</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>22-Oct</td>
<td>US$/t</td>
<td>217</td>
<td>213</td>
<td>2% ↑</td>
<td>239</td>
<td>-9% ↓</td>
</tr>
<tr>
<td>Coarse Grains – US no. 2 yellow corn, fob Gulf</td>
<td>23-Oct</td>
<td>US$/t</td>
<td>167</td>
<td>167</td>
<td>0% ●</td>
<td>161</td>
<td>4% ↑</td>
</tr>
<tr>
<td>Canola – Rapeseed, Europe, fob Hamburg</td>
<td>22-Oct</td>
<td>US$/t</td>
<td>424</td>
<td>425</td>
<td>&lt;1% ↓</td>
<td>431</td>
<td>-2% ↓</td>
</tr>
<tr>
<td>Cotton – Cotlook 'A' Index</td>
<td>23-Oct</td>
<td>USc/lb</td>
<td>75.1</td>
<td>73.1</td>
<td>3% ↑</td>
<td>87.9</td>
<td>-15% ↓</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>23-Oct</td>
<td>USc/lb</td>
<td>12.2</td>
<td>12.5</td>
<td>-2% ↓</td>
<td>13.9</td>
<td>-12% ↓</td>
</tr>
</tbody>
</table>

| **Selected domestic crop indicator prices** | | | | | | | |
| Milling Wheat – ASW1, track quote, Port Adelaide, SA | 22-Oct | A$/t | 300 | na | na ● | 399 | -25% ↓ |
| Feed Wheat – General purpose, Sydney, NSW | 23-Oct | A$/t | 385 | 385 | 0% ● | 455 | -15% ↓ |
| Feed Barley – Sydney, NSW | 23-Oct | A$/t | 385 | 370 | 4% ↑ | 420 | -8% ↓ |
| Grain Sorghum – Sydney, NSW | 23-Oct | A$/t | 345 | 345 | 0% ● | 410 | -16% ↓ |

| **Selected domestic livestock indicator prices** | | | | | | | |
| Beef – Eastern Young Cattle Indicator | 17-Oct | Ac/kg cwt | 503 | 486 | 3% ↑ | 519 | -3% ↓ |
| Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic | 18-Oct | Ac/kg cwt | 605 | 621 | -3% ↓ | 446 | 36% ↑ |
| Lamb – Eastern States Trade Lamb Indicator | 17-Oct | Ac/kg cwt | 793 | 806 | -2% ↓ | 737 | 8% ↑ |
| Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers | 11-Oct | Ac/kg cwt | 404 | 400 | 1% ↑ | 275 | 47% ↑ |
| Goat – Eastern States (12.1–16 kg) | 21-Oct | Ac/kg cwt | 870 | 870 | 0% ● | 538 | 62% ↑ |
| Live cattle – Light steers ex Darwin to Indonesia | 19-Oct | $/head | 315 | 315 | 0% ● | 300 | 5% ↑ |
| Live sheep – Live wether (Muchea WA saleyard) to Middle East | 21-Oct | $/head | 86 | na | na ● | 108 | -20% ↓ |
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>15-Oct</td>
<td>US$/t</td>
<td>3,133</td>
<td>3,141</td>
<td>&lt;1%</td>
<td>2,729</td>
<td>15%</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>15-Oct</td>
<td>US$/t</td>
<td>2,743</td>
<td>2,674</td>
<td>3%</td>
<td>1,977</td>
<td>39%</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>15-Oct</td>
<td>US$/t</td>
<td>3,636</td>
<td>3,717</td>
<td>-2%</td>
<td>3,404</td>
<td>7%</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>15-Oct</td>
<td>US$/t</td>
<td>5,065</td>
<td>4,997</td>
<td>1%</td>
<td>5,106</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

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

- World wheat indicator price
  US No. 2, hard red winter wheat, fob Gulf
  Week ended 22 October 2019

- World coarse grains indicator price
  US corn No. 2, fob Gulf
  Week ended 23 October 2019

- World canola indicator price
  Europe fob Hamburg
  Week ended 22 October 2019

- World cotton indicator price
  Cotlook ‘A’ index
  Week ended 23 October 2019
3.2. Global Dairy Trade (GDT) weighted average prices

Whole milk powder price
15 October 2019

Skim milk powder price
15 October 2019

Cheddar cheese price
15 October 2019

Anhydrous milk fat price
15 October 2019
3.3. Selected domestic crop indicator prices

- **Grain sorghum indicator price**
  - Sydney, NSW
  - Week ended 23 October 2019

- **Feed barley indicator price**
  - Sydney, NSW
  - Week ended 23 October 2019

- **Feed wheat indicator price**
  - General Purpose, Sydney, NSW
  - Week ended 23 October 2019

- **Milling wheat indicator price**
  - ASW1, track quote, Port Adelaide, SA
  - Week ended 22 October 2019
3.4. Selected domestic livestock indicator prices

Eastern Young Cattle Indicator
Week ended 17 October 2019

Mutton indicator price in Victoria
(18–24 kg fat score 2–3)
Week ended 18 October 2019

Eastern States Trade Lamb Indicator
Week ended 17 October 2019

Pig indicator price Eastern Seaboard
(60.1–75 kg)
Week ended 11 October 2019
3.5. Selected fruit and vegetable prices – week ended 24 October 2019

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
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