Summary of key issues

- During the week ending 4 September 2019 little to no rainfall was recorded across most of Australia, with falls restricted to south-western and south-eastern Australia.

- Across cropping regions rainfall totals of between 5 and 50 millimetres were recorded in southern Victoria, central Queensland, western South Australia and Western Australia. Little to no rainfall was recorded across remaining cropping regions.

- Rainfall for August 2019 was below average to average across much of Australia.

- Following a below average July, August rainfall totals greater than 25 millimetres were recorded across cropping regions in parts of southern Victoria, much of Western Australia, and southern and central South Australia. These falls are likely to have been sufficient to support continued crop and pasture development in these regions.

- Cropping regions in northern Western Australia, northern Queensland, and much of Victoria and South Australia recorded below average rainfall during August 2019, with rainfall totals less than 25 millimetres. These regions will rely heavily on timely and sufficient spring rainfall to support crop and pasture growth.

- Winter 2019 rainfall was severely deficient to extremely low for cropping regions in northern and central New South Wales, southern Queensland and parts of western South Australia. The dominant climate driver during winter 2019 was a positive Indian Ocean Dipole (IOD), which typically brings drier conditions to much of southern and central Australia.

- Lower layer soil moisture in August was very much below average to below average across most cropping regions, with the exception of the far south of New South Wales, northern Queensland and much of Victoria where lower layer soil moisture was average or better.

- Over the next eight days, limited frontal activity is expected to result in moderate rainfall over south-eastern Australia.

- Across Australia’s winter cropping regions, the 8-day rainfall forecast indicates that falls of between 5 and 15 millimetres is forecast for southern Victoria, far southern New South Wales and central South Australia. Little to no rainfall is expected across remaining cropping regions.

- Water storage levels in the Murray-Darling Basin (MDB) increased between 28 August and 3 September 2019 by 54 gigalitres (GL). Current volume of water held in storage is 10,350 GL which represents 41% of total capacity. This is 28% or 4,089 GL less than at the same time last year.

- Allocation prices in the Victorian Murray below the Barmah Choke increased from $623 per ML on 19 August 2019 to $703 per ML on 26 August 2019.
1. Climate

1.1. Rainfall this week

During the week ending 4 September 2019 little to no rainfall was recorded across most of Australia, with falls restricted to south-western and south-eastern Australia.

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

Rainfall for the week ending 4 September 2019
1.2. Monthly temperatures

August 2019 mean maximum temperatures were above average for large parts of western, eastern and northern Australia, in contrast, mean minimum temperatures were below average for large parts of south-eastern and central Australia. The national mean temperature was 0.26 °C above average. Mean maximum temperatures were 0.75 °C above average and mean minimum temperatures were -0.23 °C below average.

Maximum temperature deciles for August 2019

Minimum temperature deciles for August 2019

Note: Maximum and minimum temperatures for August 2019 compared with temperature recorded for that period during the historical record (1900 to present). For further information go to: http://www.bom.gov.au/jsp/awap/temp/index.jsp.
1.3. Monthly rainfall

Rainfall for August 2019 was below average to average across much of Australia. Particularly low rainfall was recorded across New South Wales, southern Queensland and large areas of South Australia. In contrast, rainfall was above average across parts of southern Victoria, northern Queensland, north of the Northern Territory, southern Tasmania and scattered parts of Western Australia. High-pressure systems persisted over the country for much of August, restricting movement of rain bearing systems.

Following a below average July, August rainfall totals greater than 25 millimetres were recorded across cropping regions in parts of southern Victoria, much of Western Australia, and southern and central South Australia. These falls are likely to have been sufficient to support continued crop and pasture development in these regions.

Cropping regions in northern Western Australia, much of northern Victoria and northern South Australia recorded below average rainfall during August 2019, with rainfall totals less than 25 millimetres. These regions will rely heavily on timely and sufficient spring rainfall to support crop and pasture growth.

Rainfall percentiles for August 2019

Source: Bureau of Meteorology
Note: Rainfall for August 2019 is compared with rainfall recorded for that period during the historical record (1900 to present). For further information, go to http://www.bom.gov.au/jsp/awap/
1.4. Seasonal rainfall

Winter 2019 was well below average to below average across much of Australia. Rainfall for the season was severely deficient to well below average for large areas of New South Wales, southern Queensland, eastern Western Australia, South Australia and the south of the Northern Territory. The dominant climate driver during winter was a positive Indian Ocean Dipole (IOD), which typically brings drier conditions to much of southern and central Australia.

Following a favourable start to winter for most cropping regions in June, rainfall was largely below average in July and August. Winter 2019 rainfall was severely deficient to extremely low for cropping regions in northern and central New South Wales, southern Queensland and parts of western South Australia. Winter rainfall was average for cropping regions in north-western Queensland, parts of eastern South Australia, and much of Victoria and Western Australia.

Rainfall percentiles for winter 2019 (1 June to 31 August 2019)
1.5. Monthly soil moisture

Upper layer soil moisture for August 2019 was generally average to above average across parts of southern Victoria, much of Western Australia, north-eastern Queensland, parts of western South Australia, southern Tasmania and parts of the north and west of the Northern Territory. In contrast, it was extremely low to very much below average across large areas of northern New South Wales and eastern South Australia, and parts of southern Queensland, south of the Northern Territory and isolated areas of Western Australia.

In cropping regions, upper layer soil moisture was average to above average across north-west Queensland and southern Western Australia. Upper layer soil moisture was below average across cropping regions in southern New South Wales, Victoria, south-eastern Queensland, northern Western Australia and South Australia. Soil moisture in cropping regions across northern and central New South Wales was extremely low to very much below average during August.

Modelled upper layer soil moisture for August 2019

Source: Bureau of Meteorology (Australian Water Resources Assessment Landscape model)

Note: This map shows the levels of modelled upper layer soil moisture (0 to 10 centimetres) during August 2019. This map shows how modelled soil conditions during August 2019 compare with August conditions modelled over the reference period (1911 to 2015). Dark blue areas on the maps were much wetter in August 2019 than during the reference period. The dark red areas were much drier than during the reference period. 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 is therefore useful indicator of the availability of water, particularly for germinating seed.
Lower layer soil moisture for August 2019 was extremely low to very much below average across large areas of New South Wales, South Australia, scattered areas of Western Australia, and parts of south-eastern Queensland and the Northern Territory. In contrast, it was average to above average across much of northern and central Queensland, Victoria, eastern Western Australia, western Tasmania and parts of the Northern Territory.

In cropping regions, lower layer soil moisture in August was very much below average to below average across much of New South Wales, Western Australia, South Australia and southern and eastern Queensland. In contrast, lower layer soil moisture was average or better across cropping regions in the far south of New South Wales, northern Queensland and much of Victoria.

Modelled lower layer soil moisture for August 2019

Source: Bureau of Meteorology (Australian Water Resources Assessment Landscape model)

Note: This map shows the levels of modelled lower layer soil moisture (10 to 100 centimetres) during August 2019. This map shows how modelled soil conditions during August 2019 compare with August conditions modelled over the reference period (1911 to 2015). Dark blue areas on the maps were much wetter in August 2019 than during the reference period. The dark red areas were much drier than during the reference period. The bulk of plant roots occur in the top 20 centimetres of the soil profile. 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.
1.6. Rainfall forecast for the next eight days

Over the next eight days, limited frontal activity is expected to result in moderate rainfall over south-eastern Australia. However, persistent high-pressure systems over much of southern Australia for the next eight days, is likely to restrict the movement of rain-bearing systems and resulting in little to no rainfall forecast for much of mainland Australia.

Rainfall of between 15 and 50 millimetres is forecast for southern Victoria, Tasmania and isolated parts of southern New South Wales. Higher rainfall totals up to 100 millimetres are forecast for parts of western and eastern Tasmania. Rainfall of between 1 and 15 millimetres is forecast for the south-west of Western Australia, south-eastern South Australia and remaining areas of Victoria and southern New South Wales.

In cropping regions, rainfall of between 5 and 15 millimetres is expected across southern Victoria, the far south of New South Wales and parts of central South Australia. Lighter falls of between 1 and 5 millimetres are forecast across isolated areas of southern Western Australia and remaining regions in Victoria, South Australia and southern New South Wales. Little to no rainfall is expected across cropping areas in northern New South Wales and Queensland.

Total forecast rainfall (mm) for the period 5 September to 12 September 2019
2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 54 gigalitres (GL) between 28 August and 3 September 2019. The current volume of water held in storage is 10,350 GL, which represents 41% of total capacity. This is 28% or 4,089 GL less than at the same time last year.


Allocation prices in the Victorian Murray below the Barmah Choke increased from $623 per ML on 19 August 2019 to $703 per ML on 26 August 2019. Trade restrictions are currently binding in several trading zones in the southern Murray-Darling Basin, leading to differences in water prices across the Murray Darling Basin. This differential is particularly evident in trading zones above and below the Barmah Choke.

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 5 September 2019, and encompasses water market activity until 26 August 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-050919
### 3. Commodities

#### Selected World Indicator 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>Australian Dollar – AUD/USD Exchange Rate</td>
<td>04-Sep</td>
<td>US$/A$</td>
<td>0.67</td>
<td>0.68</td>
<td>-1%</td>
<td>0.72</td>
<td>-7%</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>03-Sep</td>
<td>US$/t</td>
<td>197</td>
<td>202</td>
<td>-2%</td>
<td>246</td>
<td>-20%</td>
</tr>
<tr>
<td>Coarse Grains – US no. 2 yellow corn, fob Gulf</td>
<td>04-Sep</td>
<td>US$/t</td>
<td>155</td>
<td>157</td>
<td>-1%</td>
<td>160</td>
<td>-3%</td>
</tr>
<tr>
<td>Canola – Rapeseed, Europe, fob Hamburg</td>
<td>03-Sep</td>
<td>US$/t</td>
<td>422</td>
<td>427</td>
<td>-1%</td>
<td>440</td>
<td>-4%</td>
</tr>
<tr>
<td>Cotton – Cotlook ‘A’ Index</td>
<td>04-Sep</td>
<td>USc/lb</td>
<td>70.0</td>
<td>70.1</td>
<td>&lt;1%</td>
<td>92.3</td>
<td>-24%</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>04-Sep</td>
<td>USc/lb</td>
<td>11.2</td>
<td>11.5</td>
<td>-3%</td>
<td>10.7</td>
<td>5%</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>29-Aug</td>
<td>Ac/kg clean</td>
<td>1,375</td>
<td>1,497</td>
<td>-8%</td>
<td>2,090</td>
<td>-34%</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>30-Aug</td>
<td>Ac/kg clean</td>
<td>1,416</td>
<td>1,598</td>
<td>-11%</td>
<td>2,255</td>
<td>-37%</td>
</tr>
</tbody>
</table>

#### Selected domestic crop indicator 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>Milling Wheat – ASW1, track quote, Port Adelaide, SA</td>
<td>03-Sep</td>
<td>A$/t</td>
<td>300</td>
<td>290</td>
<td>3%</td>
<td>325</td>
<td>-8%</td>
</tr>
<tr>
<td>Feed Wheat – General purpose, Sydney, NSW</td>
<td>28-Aug</td>
<td>A$/t</td>
<td>365</td>
<td>365</td>
<td>0%</td>
<td>430</td>
<td>-15%</td>
</tr>
<tr>
<td>Feed Barley – Sydney, NSW</td>
<td>04-Sep</td>
<td>A$/t</td>
<td>360</td>
<td>360</td>
<td>0%</td>
<td>410</td>
<td>-12%</td>
</tr>
<tr>
<td>Grain Sorghum – Sydney, NSW</td>
<td>04-Sep</td>
<td>A$/t</td>
<td>325</td>
<td>325</td>
<td>0%</td>
<td>410</td>
<td>-21%</td>
</tr>
</tbody>
</table>

#### Selected domestic livestock indicator 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>Beef – Eastern Young Cattle Indicator</td>
<td>29-Aug</td>
<td>Ac/kg cwt</td>
<td>504</td>
<td>508</td>
<td>&lt;1%</td>
<td>484</td>
<td>4%</td>
</tr>
<tr>
<td>Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic</td>
<td>30-Aug</td>
<td>Ac/kg cwt</td>
<td>583</td>
<td>597</td>
<td>-2%</td>
<td>472</td>
<td>24%</td>
</tr>
<tr>
<td>Lamb – Eastern States Trade Lamb Indicator</td>
<td>29-Aug</td>
<td>Ac/kg cwt</td>
<td>803</td>
<td>806</td>
<td>&lt;1%</td>
<td>878</td>
<td>-9%</td>
</tr>
<tr>
<td>Pig – Eastern Seaboard (60.1–75 kg), average of buyers &amp; sellers</td>
<td>23-Aug</td>
<td>Ac/kg cwt</td>
<td>385</td>
<td>380</td>
<td>1%</td>
<td>248</td>
<td>55%</td>
</tr>
<tr>
<td>Goat – Eastern States (12.1–16 kg)</td>
<td>26-Aug</td>
<td>Ac/kg cwt</td>
<td>902</td>
<td>902</td>
<td>0%</td>
<td>568</td>
<td>59%</td>
</tr>
<tr>
<td>Live cattle – Light steers ex Darwin to Indonesia</td>
<td>31-Aug</td>
<td>$/head</td>
<td>310</td>
<td>310</td>
<td>0%</td>
<td>300</td>
<td>3%</td>
</tr>
<tr>
<td>Live sheep – Live wether (Muchea WA saleyard) to Middle East</td>
<td>13-May</td>
<td>$/head</td>
<td>135</td>
<td>110</td>
<td>23%</td>
<td>95</td>
<td>42%</td>
</tr>
</tbody>
</table>
### 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>03-Sep</td>
<td>US$/t</td>
<td>3,076</td>
<td>3,100</td>
<td>-1%</td>
<td>2,821</td>
<td>9%</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>03-Sep</td>
<td>US$/t</td>
<td>2,500</td>
<td>2,478</td>
<td>-1%</td>
<td>2,005</td>
<td>25%</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>03-Sep</td>
<td>US$/t</td>
<td>3,827</td>
<td>3,857</td>
<td>-1%</td>
<td>3,631</td>
<td>5%</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>03-Sep</td>
<td>US$/t</td>
<td>4,988</td>
<td>5,061</td>
<td>-1%</td>
<td>5,316</td>
<td>-6%</td>
</tr>
</tbody>
</table>

*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 3 September 2019

- **World coarse grains indicator price**
  - US corn No. 2, fob Gulf
  - Week ended 4 September 2019

- **World canola indicator price**
  - Europe fob Hamburg
  - Week ended 3 September 2019

- **World cotton indicator price**
  - Cotlook ‘A’ index
  - Week ended 4 September 2019
3.2. Global Dairy Trade (GDT) weighted average prices

Whole milk powder price
3 September 2019

Skim milk powder price
3 September 2019

Cheddar cheese price
3 September 2019

Anhydrous milk fat price
3 September 2019
3.3. Selected domestic crop indicator prices

- Grain sorghum indicator price
  Sydney, NSW
  Week ended 4 September 2019

- Feed barley indicator price
  Sydney, NSW
  Week ended 4 September 2019

- Feed wheat indicator price
  General Purpose, Sydney, NSW
  Week ended 28 August 2019

- Milling wheat indicator price
  ASW1, track quote, Port Adelaide, SA
  Week ended 3 September 2019
3.4. Selected domestic livestock indicator prices

![Graphs showing selected domestic livestock indicator prices for various commodities and time periods.](https://via.placeholder.com/150)
3.5. Selected fruit and vegetable prices – week ended 5 September 2019

[Graphs showing weekly wholesale prices for selected fruit and vegetables, with price indices plotted over time.]
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