Summary of key issues

- During the week ending 26 August 2020, complex low-pressure systems and associated cold fronts developed, bringing moderate rainfall to parts of southern Australia. These falls will be particularly beneficial for cropping regions in parts of South Australia and southern Victoria that have recorded average or lower winter rainfall to-date. The falls will provide a boost to soil moisture and stabilise crop yield potential and pasture growth rates (see Section 1.1).

- It is expected that cooling in the central and eastern tropical Pacific Ocean will continue and a La Niña-like pattern could emerge. Similarly, large parts of the Indian Ocean are warmer than average and the majority of models surveyed are expected to exceed negative IOD in September. The development of these major climate drivers are potentially contributing to the above average spring rainfall outlook for parts of Australia (see Section 1.2).

- There is a high chance that rainfall between September and November will be sufficient to sustain above average crop and pasture production through spring in areas where soil moisture is close to average or above average. With the exception of parts of Western Australia, these highly probable rainfall totals – if realised - represent an excellent finish to the 2020 winter growing season across southern Australia and start to the 2020-21 summer cropping season and wet season across northern Australia (see Section 1.3).

- Over the next eight days, Cold fronts and troughs are expected to bring rainfall to limited parts of far southern Australia, with high-pressure systems expected to prevent rain bearing systems from moving further over Australia during the week (see Section 1.4). Across cropping regions, rainfall of between 5 and 15 millimetres is expected across parts of southern Victoria, western and central South Australia, the western and southern Western Australia wheat belt and isolated parts of south-eastern New South Wales.

- Water storage levels in the Murray-Darling Basin (MDB) increased between 19 August 2020 and 26 August 2020 by 529 gigalitres (GL). The current volume of water held in storage is 13,499 GL which represents 53 per cent of total capacity.

- Allocation prices in the Victorian Murray below the Barmah Choke decreased from $310 per ML from 20 August 2020 to $232 per ML 27 August 2020. Prices are lower in the Goulburn-Broken, Murrumbidgee and regions above the Barmah Choke, due to binding of the Goulburn intervalley trade and Murrumbidgee export limits, and the Barmah Choke trade constraint.
1. Climate

1.1. Rainfall this week

During the week ending 26 August 2020 complex low-pressure systems and associated cold fronts developed, bringing moderate rainfall to parts of far southern Australia. Rainfall totals of between 10 and 50 millimetres were recorded across parts of south-eastern New South Wales, southern Victoria, southern South Australia and Tasmania. Rainfall in excess of 50 millimetres was recorded across isolated parts of southern Victoria, alpine regions in south-eastern Australia and western Tasmania.

In Australia’s cropping regions, rainfall totals of between 10 and 50 millimetres were recorded across parts of south-eastern New South Wales, southern Victoria, and western and central South Australia. Lower rainfall totals between 1 and 10 millimetres were recorded across cropping regions in far southern Western Australia and remaining cropping regions in central and southern New South Wales, northern Victoria and South Australia during the week ending 26 August 2020.

These moderate but patchy falls will be particularly beneficial for cropping regions in South Australia and southern Victoria that have recorded average or lower winter rainfall to-date. The falls will provide a boost to soil moisture and stabilise crop yield potential and pasture growth rates.

Rainfall for the week ending 26 August 2020
1.2. Climate Drivers

Following a generally favourable winter cropping season-to-date in Australia, there is interest in how the remainder of the growing season may pan out. To gain some insight it is important to look at the major climate drivers—the Indian Ocean Dipole (IOD) and the El Nino Southern Oscillation (ENSO)—that influence spring rainfall across southern Australia. If La Niña and negative IOD conditions were to eventuate as forecast by a range of international climate models, these key climate drivers would become the major influencing factor for spring rainfall outlook across eastern Australia.

If a La Niña and negative IOD conditions were to eventuate during spring, they are likely to create more favourable seasonal conditions for winter crop production than those embodied in the ABARES June 2020 editions of *Agricultural commodities* and *Australian crop report*. The enhanced probabilities of a wetter than average spring rainfall would also benefit spring pasture growth across eastern and northern Australia, summer crop production and an early northern rainfall onset.

The Bureau of Meteorology’s ENSO Outlook has progressed to La Niña ALERT. This means that while the El Niño-Southern Oscillation is currently neutral, the chance of a La Niña forming during the southern hemisphere spring has increased to around 70% - roughly three times the normal likelihood.

A La Niña ALERT is not a guarantee that a La Niña will occur; it is an indication that some of the typical precursors of an event are in place. The potential impact of a La Niña event on agricultural production across southern Australia decreases if the event forms during spring or summer, as it has a shorter time to strengthen and will persist for a shorter time before it decays in late summer.

Cooling in the central and eastern Pacific Ocean has continued and has extended along the tropical coastline of South America. Six of the surveyed international climate models suggest the cooling will exceed La Niña thresholds in spring.

**Difference from average sea surface temperature observations 10 August to 16 August 2020**

![Difference from average sea surface temperature observations 10 August to 16 August 2020](image-url)
Atmospheric indicators are mixed, with stronger than normal trade winds and decreased cloudiness near the Date Line consistent with the early stages of La Niña development, and neutral but positive Southern Oscillation Index (SOI) consistent with neutral ENSO conditions, indicating that the atmosphere has not completely linked up with the cooling Pacific Ocean patterns. Sustained SOI values above 7 typically indicate La Niña and the latest 30-day SOI value was 5.6 and the latest 90-day value was 0.3.

**30-day Southern Oscillation Index (SOI) values ending 16 August 2020**

The El Niño–Southern Oscillation (ENSO) is currently neutral and likely to remain neutral for the remainder of winter and early spring. It is expected that further cooling in the central and eastern tropical Pacific Ocean will occur and a La Niña-like pattern could emerge, potentially contributing to the above average spring rainfall outlook for parts of Australia.

**Monthly sea surface temperature anomalies for NINO3.4 region**
The Indian Ocean Dipole (IOD) is currently neutral, however large parts of the Indian Ocean are warmer than average. Additionally, the Bureau’s model and the majority of international models surveyed are expected to exceed negative IOD thresholds in September, suggesting a negative IOD is likely to develop in spring. A negative IOD typically brings above average rainfall to south-eastern Australia, and the Northern Territory and Queensland during spring and is associated with an early northern rainfall onset.

Monthly sea surface temperature anomalies for IOD region

The Southern Annular Mode (SAM) is currently negative and expected to become weakly positive for September. The SAM refers to the north-south shift of the band of rain-bearing westerly winds and weather systems in the Southern Ocean compared to the usual position. When SAM is positive during spring, this band of westerly winds is further south than normal. This allows for increased moist onshore flow from the Tasman and Coral seas and more rainfall across eastern Australia and a reduced chance of extreme heat.

Southern Annular Mode (SAM) daily index
1.3. National Climate Outlook

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 latest rainfall outlook released by the Bureau of Meteorology suggests above average rainfall is likely for much of Australia and average rainfall is likely for the western coastline during September.

The rainfall outlook for September to November 2020 suggests that wetter than average conditions are much more likely for central and eastern Australia and drier than average conditions are more likely for parts of north-western Australia. There are roughly equal chances of a wetter or drier than average three months across the remainder of Australia (Bureau of Meteorology 'National Climate Outlook', 20 August 2019). Bureau of Meteorology rainfall outlooks for September and November have greater than 65% past accuracy across most of the eastern half of Australia and lower accuracy, less than 55%, across parts of central Western Australia.

**Chance of exceeding the median rainfall September to November 2020**

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Issued: 20/08/2020
The outlook for September 2020 suggests that there is a 75% chance of rainfall totals between 10 and 50 millimetres across south-eastern and far southern Australia. Rainfall totals in excess of 50 millimetres are likely across isolated parts of south-eastern Australia, far south-western Australia and much of Tasmania.

There is a high chance of recording close to average September rainfall totals across most agricultural regions, with the exception of south-western Australia. These totals are likely to support above average crop yield potentials across New South Wales and Victoria, and parts of South Australia.

In cropping regions there is a 75% chance of rainfall totals between 10 and 50 millimetres across much of New South Wales, Victoria and South Australia. In Queensland and Western Australia there is a 75% chance of rainfall totals between 10 and 25 millimetres across most cropping regions, with rainfall totals up to 50 millimetres across isolated parts of south-east Queensland and the far south and west of Western Australian wheat belt for September 2020.

Rainfall totals that have a 75% chance of occurring September 2020

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Issued: 20/08/2020
The outlook for September to November 2020 suggests that there is a 75% chance of rainfall totals between 50 and 200 millimetres across much of eastern Australia and parts of northern, central and far south-western Australia. Lower rainfall totals between 25 and 50 millimetres are likely across the remainder of central Australia and parts of south-western Australia. Rainfall totals in excess of 200 millimetres are likely across isolated parts of eastern New South Wales, alpine regions in south-eastern Australia and western Tasmania.

These totals indicate that the northern rainfall onset may occur in parts of central and eastern Queensland and the north of the Northern Territory during October and November. The onset occurs when the total rainfall after 1 September reaches 50 millimetres, this is considered approximately the amount of rainfall required to stimulate plant growth.

In many areas where soil moisture is close to average to above average for this time of year, there is a high chance of recording September to November rainfall totals sufficient to sustain above average crop and pasture production through spring. In cropping regions, there is a 75% chance of receiving between 100 and 200 millimetres across most of New South Wales, Queensland and parts of southern Victoria and central South Australia. Rainfall totals between 25 and 100 millimetres are likely across cropping regions in northern Victoria, much of South Australia and Western Australia, and isolated parts of south-western New South Wales and northern Queensland between September and November 2020.

With the exception of parts of Western Australia these high chance expected rainfall totals are equivalent to the seasonal median between (1990 and 2012) and represent an excellent finish to the 2020 winter growing season across southern Australia and start to the 2020-21 summer cropping season and wet season across northern Australia.

Rainfall totals that have a 75% chance of occurring September to November 2020
The temperature outlook for September to November 2020 indicates that temperatures are likely to be between 1°C to 2°C above the 1990-2012 average across parts of northern Australia during the daytime and much of northern and north-eastern Australia during the night-time. Average (-1°C to 1°C) daytime and night-time temperatures are likely for the remainder of the country (Bureau of Meteorology ‘National Climate Outlook’, 20 August 2020).

**Predicted maximum temperature anomaly for September to November 2020**

**Predicted minimum temperature anomaly for September to November 2020**
1.4. Rainfall forecast for the next eight days

Cold fronts and troughs are expected to bring rainfall to limited parts of far southern Australia, with high-pressure systems expected to prevent rain bearing systems from moving further over Australia during the week. Rainfall totals of between 10 and 50 millimetres are forecast for parts of southern Victoria, south-western Western Australia and Tasmania. Rainfall in excess of 50 millimetres is expected across western Tasmania.

In cropping regions, rainfall of between 5 and 15 millimetres is expected across parts of southern Victoria, western and central South Australia, the south and west Western Australia wheat belt and isolated parts of south-eastern New South Wales. Little to no rainfall is expected across cropping regions in Queensland and remaining cropping regions in New South Wales, Victoria, South Australia and Western Australia during the next eight days.
2. Water

2.1. Water markets – current week

Water storage in the Murray–Darling Basin (MDB) increased by 529 gigalitres (GL) between 19 August 2020 and 26 August 2020. The current volume of water held in storage is 13,499 GL, which represents 53% of total capacity. This is 29% or 3,054 GL more than at the same time last year.

Water storages in the Murray-Darling Basin, 2013–2020

Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke decreased from $310 per ML from 20 August 2020 to $232 per ML 27 August 2020. Prices are lower in the Goulburn-Broken, Murrumbidgee and regions above the Barmah Choke, due to binding of the Goulburn intervalley trade and Murrumbidgee export limits, and the Barmah Choke trade constraint.

<table>
<thead>
<tr>
<th>Region</th>
<th>$/ML</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Murray Above</td>
<td>163</td>
</tr>
<tr>
<td>NSW Murrumbidgee</td>
<td>155</td>
</tr>
<tr>
<td>VIC Goulburn-Broken</td>
<td>170</td>
</tr>
<tr>
<td>VIC Murray Below</td>
<td>232</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 is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior to the 30 October 2019 reflect recorded transaction prices as sourced from Ruralco. Prices after the 30 October 2019 are sourced from Waterflow. Data for volume traded is sourced from the BOM water register. Data shown is current at 27 August 2020.

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-270820

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### 3. Commodities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Week ended</th>
<th>Unit</th>
<th>Latest price</th>
<th>Previous week</th>
<th>Weekly change</th>
<th>Price 12 months ago</th>
<th>Annual 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>AUD/USD Exchange rate</td>
<td>26-Aug</td>
<td>A$/US$</td>
<td>0.72</td>
<td>0.72</td>
<td>0%</td>
<td>0.68</td>
<td>6%</td>
</tr>
<tr>
<td>Wheat – US no. 2 hard red winter wheat, fob Gulf</td>
<td>26-Aug</td>
<td>US$/t</td>
<td>228</td>
<td>223</td>
<td>2%</td>
<td>195</td>
<td>17%</td>
</tr>
<tr>
<td>Corn – US no. 2 yellow corn, fob Gulf</td>
<td>26-Aug</td>
<td>US$/t</td>
<td>150</td>
<td>150</td>
<td>1%</td>
<td>152</td>
<td>-1%</td>
</tr>
<tr>
<td>Canola – Rapeseed, Canada, fob Vancouver</td>
<td>26-Aug</td>
<td>US$/t</td>
<td>374</td>
<td>367</td>
<td>2%</td>
<td>357</td>
<td>5%</td>
</tr>
<tr>
<td>Cotton – Cotlook ‘A’ Index</td>
<td>26-Aug</td>
<td>USc/lb</td>
<td>71</td>
<td>69</td>
<td>3%</td>
<td>75</td>
<td>-5%</td>
</tr>
<tr>
<td>Sugar – Intercontinental Exchange, nearby futures, no.11 contract</td>
<td>26-Aug</td>
<td>USc/lb</td>
<td>13</td>
<td>13</td>
<td>-2%</td>
<td>11</td>
<td>13%</td>
</tr>
<tr>
<td>Wool – Eastern Market Indicator</td>
<td>26-Aug</td>
<td>Ac/kg clean</td>
<td>929</td>
<td>945</td>
<td>-2%</td>
<td>1,715</td>
<td>-46%</td>
</tr>
<tr>
<td>Wool – Western Market Indicator</td>
<td>19-Aug</td>
<td>Ac/kg clean</td>
<td>989</td>
<td>1,046</td>
<td>-5%</td>
<td>2,093</td>
<td>-53%</td>
</tr>
<tr>
<td><strong>Selected Australian grain export prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milling Wheat – APW, Port Adelaide, SA</td>
<td>26-Aug</td>
<td>A$/t</td>
<td>319</td>
<td>319</td>
<td>0%</td>
<td>356</td>
<td>-10%</td>
</tr>
<tr>
<td>Feed Wheat – ASW, Port Adelaide, SA</td>
<td>26-Aug</td>
<td>A$/t</td>
<td>304</td>
<td>304</td>
<td>0%</td>
<td>343</td>
<td>-11%</td>
</tr>
<tr>
<td>Feed Barley – Port Adelaide, SA</td>
<td>26-Aug</td>
<td>A$/t</td>
<td>265</td>
<td>265</td>
<td>0%</td>
<td>322</td>
<td>-18%</td>
</tr>
<tr>
<td>Canola – Kwinana, WA</td>
<td>26-Aug</td>
<td>A$/t</td>
<td>632</td>
<td>627</td>
<td>1%</td>
<td>648</td>
<td>-2%</td>
</tr>
<tr>
<td>Grain Sorghum – Brisbane, QLD</td>
<td>26-Aug</td>
<td>A$/t</td>
<td>363</td>
<td>361</td>
<td>1%</td>
<td>398</td>
<td>-9%</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>26-Aug</td>
<td>Ac/kg cwt</td>
<td>784</td>
<td>765</td>
<td>2%</td>
<td>470</td>
<td>67%</td>
</tr>
<tr>
<td>Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic</td>
<td>12-Aug</td>
<td>Ac/kg cwt</td>
<td>499</td>
<td>502</td>
<td>-1%</td>
<td>550</td>
<td>-9%</td>
</tr>
<tr>
<td>Lamb – Eastern States Trade Lamb Indicator</td>
<td>12-Aug</td>
<td>Ac/kg cwt</td>
<td>683</td>
<td>703</td>
<td>-3%</td>
<td>729</td>
<td>-6%</td>
</tr>
<tr>
<td>Pig – Eastern Seaboard (60.1–75 kg), average of buyers &amp; sellers</td>
<td>05-Aug</td>
<td>Ac/kg cwt</td>
<td>309</td>
<td>299</td>
<td>3%</td>
<td>350</td>
<td>-12%</td>
</tr>
<tr>
<td>Goat – Eastern States (12.1–16 kg)</td>
<td>12-Aug</td>
<td>Ac/kg cwt</td>
<td>753</td>
<td>753</td>
<td>0%</td>
<td>935</td>
<td>-19%</td>
</tr>
<tr>
<td>Live cattle – Light steers ex Darwin to Indonesia</td>
<td>12-Aug</td>
<td>Ac/kg lwt</td>
<td>355</td>
<td>355</td>
<td>0%</td>
<td>290</td>
<td>22%</td>
</tr>
<tr>
<td>Live sheep – Live wether (Muchea WA saleyard) to Middle East</td>
<td>11-Dec</td>
<td>$/head</td>
<td>105</td>
<td>140</td>
<td>-25%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Indicator</td>
<td>Week ended</td>
<td>Unit</td>
<td>Latest price</td>
<td>Previous week</td>
<td>Weekly change</td>
<td>Price 12 months ago</td>
<td>Annual change</td>
</tr>
<tr>
<td>-----------</td>
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<td>--------------</td>
</tr>
<tr>
<td>Dairy – Whole milk powder</td>
<td>19-Aug</td>
<td>US$/t</td>
<td>2,936</td>
<td>3,003</td>
<td>-2%</td>
<td>2,905</td>
<td>1%</td>
</tr>
<tr>
<td>Dairy – Skim milk powder</td>
<td>19-Aug</td>
<td>US$/t</td>
<td>2,608</td>
<td>2,583</td>
<td>1%</td>
<td>1,913</td>
<td>36%</td>
</tr>
<tr>
<td>Dairy – Cheddar cheese</td>
<td>19-Aug</td>
<td>US$/t</td>
<td>3,442</td>
<td>3,568</td>
<td>-4%</td>
<td>3,713</td>
<td>-7%</td>
</tr>
<tr>
<td>Dairy – Anhydrous milk fat</td>
<td>19-Aug</td>
<td>US$/t</td>
<td>3,873</td>
<td>3,994</td>
<td>-3%</td>
<td>5,937</td>
<td>-35%</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

![AUD/USD Exchange rate](chart)

![Wheat – US no. 2 hard red winter wheat, fob Gulf](chart)

![Corn – US no. 2 yellow corn, fob Gulf](chart)

![Canola – Rapeseed, Canada, fob Vancouver](chart)
Cotton – Cotlook 'A' Index

Sugar – Intercontinental Exchange, nearby futures, no.11 contract

Wool – Eastern Market Indicator

Wool – Western Market Indicator
3.2. Selected domestic crop indicator prices
3.3. Selected domestic livestock indicator prices

![Graphs showing selected domestic livestock indicator prices for Beef, Mutton, Lamb, and Pig](image)
3.4. Global Dairy Trade (GDT) weighted average prices

- Dairy – Whole milk powder
- Dairy – Skim milk powder
- Dairy – Cheddar cheese
- Dairy – Anhydrous milk fat
3.5. Selected fruit and vegetable prices

![Watermelons Seedless Kg Graph](image1)

![Kiwifruit Hayward Bulk Pk Graph](image2)

![Blueberries 125g Graph](image3)

![Strawberries 250g Graph](image4)
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