

Australian Government

Department of Agriculture, Water and the Environment ABARES

Weekly Australian Climate, Water and Agricultural Update



No. 25/2022

30 June 2022

Summary of key issues

- For the week ending 29 June 2022, low-pressure systems and associated cold fronts brought rainfall to southern parts of the country, while isolated troughs resulted in rainfall in parts of central and north-eastern Australia. For much of the country, high-pressure systems dominated, providing clear, dry conditions (see Section 1.1).
- The persistence of dry conditions across New South Wales and Queensland cropping regions over recent weeks has allowed growers to access fields. Consequently, harvesting of summer crops has progressed substantially, with much of the late harvested crop impacted by quality downgrades. The improved field access has also allowed the sowing of winter cereal crops to make significant headway in recent weeks. Across growing regions of southern Australia, winter crops have had a favourable start to the season, with soil moisture levels remaining average to above average. Soil moisture levels in cropping regions of Western Australia are currently below average to average, and further rainfall will be required to support ongoing crop development.
- Greenness anomalies at 25 June 2022 indicate that vegetation greenness was above normal throughout most of the cropping regions in New South Wales, central and southern Queensland and northern Victoria. This indicates above average vegetation growth and vigour for this time of year due to well above average autumn and early winter rainfall in these regions. However, vegetation greenness was closer to average in cropping areas in central South Australia and parts of northern New South Wales and southern Victoria, indicating below average to average vegetation growth and crop vigour for this time of year (see Section 1.2).
- Over the 8-days to 7 July 2022, an East Coast Low and troughs across north-eastern Australia are expected to bring significant rainfall to eastern parts of the country. Meanwhile, high pressure systems are forecast to dominate remaining parts of the country, resulting in clear, dry conditions. The forecast rainfall for the coming week will likely bring winter sowing activity to a close across New South Wales and Queensland. Dry conditions have allowed significant progress over recent weeks, but the closing of the planting window combined with significant rainfalls will severely restricting further planting opportunities. The forecast rainfall will support the emergence and establishment of recently planted winter crops, as well as boosting soil moisture levels for the coming months (see Section 1.3).
- Water storage in the Murray–Darling Basin (MDB) increased by 36 gigalitres (GL) between 22 June 2022 and 28 June 2022. The current volume of water held in storage is 22,152 GL, which represents 88 of total capacity. This is 36% or 5,858 GL more than at the same time last year.
- Allocation prices in the Victorian Murray below the Barmah Choke decreased from \$18 per ML on 17 June 2022 to \$11 per ML on 24 June 2022. Prices are lower in the Murrumbidgee and regions above the Barmah choke due to the binding of the Murrumbidgee export limit and Barmah choke trade constraint.

1. Climate

1.1. Rainfall this week

For the week ending 29 June 2022, low-pressure systems and associated cold fronts brought rainfall to southern parts of the country, while isolated troughs resulted in rainfall in parts of central and north-eastern Australia. For much of the country, high-pressure systems dominated, providing clear, dry conditions.

Rainfall totals of between 10 and 50 millimetres were recorded in parts of southern and alpine areas of Victoria, isolated parts of north-eastern Queensland, the south-east of South Australia and the south-west of Western Australia, as well as central areas of the Northern Territory and northern Tasmania. Rainfall totals in excess of 50 millimetres were recorded across western Tasmania. Remaining parts of Australia received little to no rainfall.

Little to no rainfall was recorded across Australian cropping regions for the week ending 29 June 2022. The persistence of dry conditions across New South Wales and Queensland cropping regions over recent weeks has allowed growers to access fields. Consequently, harvesting of summer crops has progressed substantially, with much of the late harvested crop impacted by quality downgrades. The improved field access has also allowed the sowing of winter cereal crops to make significant headway in recent weeks.

However, the delays in planting as well as isolated areas still too wet to access has likely prompted some of the area intended for winter crop production to be withheld until summer planting commences. Across growing regions of southern Australia, winter crops have had a favourable start to the season, with soil moisture levels remaining average to above average. Soil moisture levels in cropping regions of Western Australia are currently below average to average, and further rainfall will be required to support ongoing crop development. Overall, recent dry conditions have allowed growers to access fields for post-emergence spraying for pests and disease.



Rainfall for the week ending 29 June 2022

Note: 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/

1.2. Vegetation greenness anomalies

For the week ending 17 June 2022 vegetation greenness anomalies analysis indicates that plant health was well above average for this time of year for Australian croplands. Vegetation greenness anomalies are based on Normalized Difference Vegetation Index (NDVI) land surface data collected from satellites and shows the level of photosynthetic activity (or greenness) of plants. It can indicate the effectiveness of rainfall for plant growth and can be used to help assess the impacts of seasonal conditions on crop production.





Greenness anomalies at 25 June 2022 indicate that vegetation greenness was above normal throughout most of the cropping regions in New South Wales, central and southern Queensland and northern Victoria. This indicates above average vegetation growth and vigour for this time of year—due to well above average autumn and early winter rainfall in these regions. However, vegetation greenness was closer to average in cropping areas in central South Australia and parts of northern New South Wales and southern Victoria, indicating below average to average vegetation growth and crop vigour for this time of year.



Source: National Aeronautics and Space Administration

1.3. Rainfall forecast for the next eight days

Over the 8-days to 7 July 2022, an East Coast Low and troughs across north-eastern Australia are expected to bring significant rainfall to eastern parts of the country. Meanwhile, high pressure systems are forecast to dominate remaining parts of the country, resulting in clear, dry conditions.

Rainfall totals of between 10 and 50 millimetres are forecast for eastern New South Wales and Victoria, as well as large parts of Queensland, the north of the Northern Territory, the south-west of Western Australia and Tasmania. Rainfall in excess of 50 millimetres is forecast for coastal regions of New South Wales and Queensland. Little to no rainfall is forecast across remaining parts of Australia over the next 8-days.

In Australian cropping regions, rainfall totals of between 10 and 50 millimetres are expected across much of New South Wales and Queensland. Rainfall in excess of 50 millimetres is forecast for cropping regions in central New South Wales and eastern Queensland. Little to no rainfall is forecast for all remaining cropping regions during the next 8-days.

The forecast rainfall for the coming week will likely bring winter sowing activity to a close across New South Wales and Queensland. Dry conditions have allowed significant progress over recent weeks, but the closing of the planting window combined with significant rainfalls will severely restricting further planting opportunities. The forecast rainfall will support the emergence and establishment of recently planted winter crops, as well as boosting soil moisture levels for the coming months. Winter crops across Victoria, South Australia and Western Australia are expected to continue to develop through vegetative growth stages, supported for the most part by near-average soil moisture levels. However, the shallow, sandy soils of Western Australia mean that plant available moisture decreases more rapidly, and further rainfall will be needed in the coming weeks.



Total forecast rainfall (mm) for the period 30 June to 7 July 2022

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) increased by 36 gigalitres (GL) between 22 June 2022 and 28 June 2022. The current volume of water held in storage is 22,152 GL, which represents 88 of total capacity. This is 36% or 5,858 GL more than at the same time last year.





Water storage data is sourced from the Bureau of Meteorology.

Allocation prices in the Victorian Murray below the Barmah Choke decreased from \$18 per ML on 17 June 2022 to \$11 per ML on 24 June 2022. Prices are lower in the Murrumbidgee and regions above the Barmah choke due to the binding of the Murrumbidgee export limit and Barmah choke trade constraint.

Region	\$/ML
NSW Murray Above	1
NSW Murrumbidgee	1
VIC Goulburn-Broken	18
VIC Murray Below	11

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 30 June 2022.

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/products/weekly_update/weekly-update-300622

3. Commodities

Indicator	Week ended	Unit	Latest price	Previous week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	29-Jun	A\$/US\$	0.70	0.70	-1%	0.75	-8%
Wheat – US no. 2 hard red winter wheat, fob Gulf	29-Jun	US\$/t	420	453	-7%	279	51%
Corn – US no. 2 yellow corn, fob Gulf	29-Jun	US\$/t	342	348	-2%	271	26%
Canola – Rapeseed, Canada, fob Vancouver	29-Jun	US\$/t	764	864	-12%	710	8%
Cotton – Cotlook 'A' Index	29-Jun	USc/lb	138	161	-15%	96	43%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	29-Jun	USc/lb	18.4	18.8	-2%	18	1%
Wool – Eastern Market Indicator	24-Jun	Ac/kg clean	1,474	1,467	0%	1,319	12%
Wool – Western Market Indicator	06-Apr	Ac/kg clean	1,417	1,421	0%	1,222	16%
Selected Australian grain export prices							
Milling Wheat – APW, Port Adelaide, SA	29-Jun	A\$/t	607	628	-3%	381	59%
Feed Wheat – ASW, Port Adelaide, SA	29-Jun	A\$/t	572	594	-4%	376	52%
Feed Barley – Port Adelaide, SA	29-Jun	A\$/t	541	555	-3%	326	66%
Canola – Kwinana, WA	29-Jun	A\$/t	1,161	1,215	-4%	740	57%
Grain Sorghum – Brisbane, QLD	29-Jun	A\$/t	457	475	-4%	373	22%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	29-Jun	Ac/kg cwt	1,032	1,070	-3%	907	14%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	29-Jun	Ac/kg cwt	634	657	-4%	653	-3%
Lamb – Eastern States Trade Lamb Indicator	29-Jun	Ac/kg cwt	775	771	0%	837	-7%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	30-Mar	Ac/kg cwt	368	357	3%	347	6%
Goats – Eastern States (12.1–16 kg)	12-Jan	Ac/kg cwt	879	879	0%	818	8%
Live cattle – Light steers ex Darwin to Indonesia	01-Jun	Ac/kg lwt	480	480	0%	320	50%
Live sheep – Live wethers (Muchea WA saleyard) to Middle East	20-Apr	\$/head	113	113	0%	122	-7%

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Indicator	Week ended	Unit	Latest	Previous week	Weekly	Price 12 months ago	Annual
Global Dairy Trade (GDT) weighted average prices ^a			price	Week	enunge	months ugo	enunge
Dairy – Whole milk powder	22-Jun	US\$/t	4,125	4,158	-1%	2,745	50%
Dairy – Skim milk powder	22-Jun	US\$/t	4,276	4,240	1%	2,373	80%
Dairy – Cheddar cheese	22-Jun	US\$/t	4,875	5,365	-9%	4,115	18%
Dairy – Anhydrous milk fat	22-Jun	US\$/t	5,913	6,201	-5%	3,973	49%

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

3.1. Selected world indicator prices





3.2. Selected domestic crop indicator prices















3.4. Global Dairy Trade (GDT) weighted average prices

3.5. Selected fruit and vegetable prices









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3.6. Selected domestic fodder indicator prices



4. Data attribution

Climate

Bureau of Meteorology

- Weekly rainfall totals: <u>www.bom.gov.au/climate/maps/rainfall/</u>
- Monthly and last 3-month rainfall percentiles: <u>www.bom.gov.au/water/landscape/</u>
- Temperature anomalies: <u>www.bom.gov.au/jsp/awap/temp/index.jsp</u>
- Rainfall forecast: <u>www.bom.gov.au/jsp/watl/rainfall/pme.jsp</u>
- Seasonal outlook: www.bom.gov.au/climate/outlooks/#/overview/summary/
- Climate drivers: <u>http://www.bom.gov.au/climate/enso/</u>
- Soil moisture: <u>www.bom.gov.au/water/landscape/</u>

Other

- Pasture growth: <u>www.longpaddock.qld.gov.au/aussiegrass/</u>
- 3-month global outlooks: <u>Environment and Climate Change Canada</u>, <u>NOAA Climate Prediction Center</u>, <u>EUROBRISA CPTEC/INPE</u>, <u>European Centre for Medium-Range Weather Forecasts</u>, <u>Hydrometcenter of Russia</u>, <u>National Climate Center Climate System Diagnosis</u> <u>and Prediction Room (NCC)</u>, <u>International Research Institute for Climate and Society</u>
- Global production: <u>https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx</u>
- Autumn break: Pook et al., 2009, <u>https://rmets-onlinelibrary-wiley-com.virtual.anu.edu.au/doi/epdf/10.1002/joc.1833</u>

Water

Prices

- Waterflow: <u>https://www.waterflow.io/</u>
- Ruralco: <u>https://www.ruralcowater.com.au/</u>
- Bureau of Meteorology:
- Allocation trade: <u>http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at</u>
- Storage volumes: <u>http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage</u>

Trade constraints:

- Water NSW: <u>https://www.waternsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee</u>
- Victorian Water Register: <u>https://www.waterregister.vic.gov.au/TradingRules2019/</u>

Commodities

Fruit and vegetables

Datafresh: <u>www.freshstate.com.au</u>

Pigs

- Australian Pork Limited: <u>www.australianpork.com.au</u>
- Global Dairy Trade: www.globaldairytrade.info/en/product-results/
- , World wheat, canola
- International Grains Council
- World coarse grains
- United States Department of Agriculture
- World cotton
- Cotlook: <u>www.cotlook.com/</u>

World sugar

New York Stock Exchange - Intercontinental Exchange

Wool

- Australian Wool Exchange: <u>www.awex.com.au/</u>
- Domestic wheat, barley, sorghum, canola and fodder
 - Jumbuk Consulting Pty Ltd: <u>http://www.jumbukag.com.au/</u>
- Cattle, beef, mutton, lamb, goat and live export
- Meat and Livestock Australia: <u>www.mla.com.au/Prices-and-market</u>

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Cataloguing data

This publication (and any material sourced from it) should be attributed as:

ABARES 2022, Weekly Australian Climate, Water and Agricultural Update, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, 30 June 2022. CC BY 4.0 DOI: <u>https://doi.org/10.25814/5f3e04e7d2503</u>

ISSN 2652-7561

This publication is available at https://www.awe.gov.au/abares/products/weekly_update

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Acknowledgements

This report was prepared by Matthew Miller and Cameron Van-Lane.