

Issued 15 October 2019

This statement provides River Murray irrigators with information about water availability for the 2019-20 water year to inform business planning. It supersedes the previous statement issued by the Department for Environment and Water (DEW) on 1 October 2019.

It contains information on South Australia's River Murray Entitlement, allocations, private carryover, water held in storage, climate outlook and projections of irrigation water allocations under a range of outlook scenarios for 2019-20.

Minimum Irrigation Allocation

The minimum irrigation water allocation for the 2019-20 water year remains at 87 per cent. Minimum allocations for other classes of water are included in Table A.

Table A Minimum allocations 2019-20

Water Product	Minimum Allocation
All Purpose - Class 1 (stock and domestic)	100%
All Purpose – Class 2 (country towns)	87%
All Purpose – Class 3 (irrigation)	87%
All Purpose – Class 5 (industrial and dairy)	100%
Metropolitan Adelaide – Class 6	70%
All Purpose – Class 8 (environmental land management)	87%

The last water allocation announcement of 87 per cent (announced on 1 October 2019) was gazetted on 3 October 2019. This notice will remain in place.

Water allocation decisions are made based on South Australia's water allocation framework detailed in the Water Allocation Plan for the South Australian River Murray Prescribed Watercourse.

Figure 3 at the end of this document illustrates how available water from South Australia's Entitlement is prioritised and the relationship between the Entitlement and allocations.

Private Carryover

The maximum allocation against entitlements for a water year is 100 per cent, including private carryover.

In 2019-20, private carryover has been made available for eligible Class 3 entitlement holders. Letters have been sent to license holders who have been granted private carryover in 2019-20 and carryover has now been endorsed on water accounts.

South Australia's River Murray Entitlement

The projected minimum amount of water that will be delivered to South Australia as Entitlement flow in 2019-20 is 1,410 gigalitres (GL). This volume has not increased since the last Water Allocation Statement on 1 October 2019.

The volume assumes that future inflows in 2019-20 will be consistent with the lowest inflows on record.

Since the last announcement on 1 October, both New South Wales and Victoria received improvements to their water resource availability as a result of state owned tributary inflows and internal spills in Lake Victoria from Victoria to New South Wales.

Water held in storage

At 9 October 2019, the Murray-Darling Basin Authority (MDBA) controlled storages were holding 3,962 GL (43 per cent of total capacity).

The long-term average volume held in storage at the end of October is 7,498 GL (81 per cent of total capacity).

A total of 102 GL of water is currently held in storage for South Australian private carryover.

Table B Water held in Murray-Darling Basin storages at 9 October 2019

Storage Full Supply Volum		Current Volume		South Australian Private Carryover Volume	
	GL	GL	%	GL	
Dartmouth Dam	3,856	2,201	57	102	
Hume Dam	3,005	1,221	41	0	
Lake Victoria	677	527	78	0	
Menindee Lakes	1,731	13	1	0	
Total	9,269	*3,962	43	102	

^{*} includes water for carryover purposes and reserves

For more information on Murray-Darling Basin storages visit the MDBA website.

Climate outlook

The Bureau of Meteorology (BoM) seasonal outlook for the next three months indicates that across the Murray-Darling Basin it is likely to be drier than average with warmer temperatures. A drier than average three months is likely for much of south-east Australia (Figure 1 left-hand side). Above average maximum temperatures are also likely (Figure 1 right-hand side).

The El Niño—Southern Oscillation (ENSO) is currently neutral. International climate models forecast neutral ENSO for the remainder of 2019 and into early 2020. The Indian Ocean temperature is likely to be the key influence on Australia's climate during the coming months. The positive Indian Ocean Dipole (IOD) has strengthened, continuing its influence on the climate of Australia and other parts of the globe.

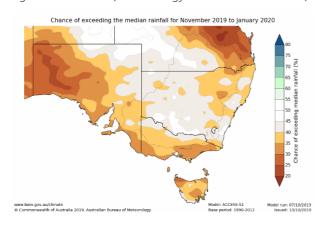
Typically, a positive IOD brings below average winter-spring rainfall to southern and central Australia, with

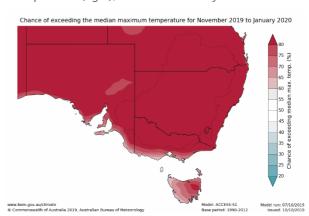
warmer days for the southern two-thirds of the country. All international climate models surveyed by the BoM indicate the positive IOD is likely to persist at least until the end of the southern hemisphere spring. At the beginning of summer, the IOD pattern normally breaks down as the monsoon trough migrates into the southern hemisphere.

A prolonged period of negative Southern Annular Mode (SAM) may also contribute to the dry/warm outlooks for eastern Australia during October and November. The effect that the SAM has on rainfall varies greatly depending on the season and region.

For more information on seasonal rainfall and temperature outlooks go to the <u>BoM website</u>.

Figure 1 Bureau of Meteorology seasonal outlook. Rainfall (left) and Temperature (right), November-January 2019





Water availability projections

Water availability projections are a tool to help water users better understand the likelihood of future water allocations.

The water availability projections provide a guide about future water allocation increases based on River Murray system modelling and South Australia's River Murray Water Allocation Framework.

The modelling sets all storages and flows in the system to current conditions and uses historical inflow and climate conditions over the last 30 years to create unique inflow sequences.

The range of water availability conditions included in the table and graph (see Table C and Figure 2) are based on *historical* variability in rainfall and temperature, in combination with current policy and operational settings.

According to the projections, unless improvements in water availability for the remainder of 2019-20 are worse than for any year in the last 30, water allocations remain likely to get to 100 per cent by the end of the water year.

The projections do not incorporate information from the BoM's recently updated seasonal outlook, which indicates that it is likely to be drier than average across the catchment.

Table C Water allocation scenarios under a range of water availability conditions for SA River Murray entitlements (Class 3)

SA River Murray Irrigation Allocation Scenarios* All Purpose – Class 3	Minimum Allocation for 2019-20	1 Nov 2019	1 Jan 2020	1 Apr 2020	
15 October 2019	Projected Allocation as %				
Exceptionally dry - 99% likelihood allocation will be at least	87	87%	94%	100%	
Extreme dry conditions - 95% likelihood allocation will be at least	87	87%	100%	100%	
Very dry conditions - 90% likelihood allocation will be at least	87	88%	100%	100%	
Dry conditions - 75% likelihood allocation will be at least	87	90%	100%	100%	
Average conditions - 50% likelihood allocation will be at least	87	95%	100%	100%	
Wet conditions - 25% likelihood allocation will be at least	87	99%	100%	100%	

Based on data provided by MDBA on 10 October 2019.

DISCLAIMER: This data is provided for information only. Historical performance is not necessarily an indicator of future outcomes. Projections are based on historical climate variability across the last 30 years. The Government of South Australia accepts no liability for any loss resulting from the use of or reliance on any of this data or information.



^{*}Based on modelling of water availability that simulates historical variability in rainfall and temperature, in combination with current policy and operational settings.

100% Wet - 25% likelihood allocation will be at least South Australia's River Murray Irrigation Allocation 80% Average - 50% likelihood allocation will be at least (median) 70% Dry - 75% likelihood 60% allocation will be at least 50% Very Dry - 90% likelihood allocation will be at least 40% Extreme Dry - 95% likelihood 30% allocation will be at least 20% Exceptionally dry - 99% likelihood allocation will be at least 10% 0% ••••• Minimum allocation JUL AUG SEP OCT NOV DFC JAN FFB MAR APR MAV * Based on the volume of water held in River Murray Storages at 10 October 2019. This data is provided for information only. Historical performance is not necessarily an indicator of future outcomes. Projections are based on historical climate variability across the last 30 years. The Government of South Australia accepts no liability for any loss resulting from the use of or reliance on any of this data or information.

Figure 2 Projected water allocation scenarios under a range of water availability conditions for SA River Murray entitlements (Classes 2, 3 and 8)

Next announcement

The next announcement will be provided on 1 November 2019.

The Department for Environment and Water (DEW) will provide water availability updates twice per month during the 2019-20 water year while water allocations are less than 100 per cent.

Further Information

To speak with someone about your water allocation or account:

- drop into the water licensing office at 2 Wade Street, Berri SA
- call the water licensing office on (08) 8595 2053
- email water licensing on <u>DEW.WaterLicensingBerri@sa.gov.au</u>

To speak with someone about water allocation projections contact:

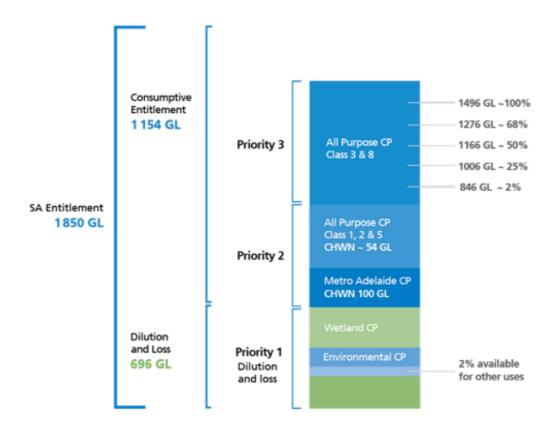
- Dr Ashley Kingsborough, Principal Policy Adviser
 T: (08) 8463 7991
- Mr Jarrod Eaton, Manager Water Delivery
 T: (08) 8463 7927

For more information on South Australia's water allocations:

- visit the <u>DEW website</u>
- email <u>sarah.meins@sa.gov.au</u> to receive the weekly River Murray Flow Report.



Figure 3 2019 River Murray Water Allocation Plan's allocation framework*



^{*} This figure illustrates how water is prioritised and provides a guide as to how allocations will change with improvements in South Australia's River Murray Entitlement. The <u>Water Allocation Plan for the South Australian River Murray Prescribed Watercourse</u> details how water is allocated. Water is made available to one or more Consumptive Pools (CP) and then shared in accordance with the principles in the water allocation plan.