

#### **Issued 1 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 16 September 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 updated minimum irrigation water allocation for the 2019-20 water year is 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 81 per cent (announced on 16 September 2019) was gazetted on 19 September 2019.

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 part of its Entitlement in 2019-20 is 1,410 gigalitres (GL).

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

## Water held in storage

At 26 September 2019, the Murray-Darling Basin Authority (MDBA) controlled storages were holding 4,101 GL (44 per cent of capacity).

The long-term average volume held in storage at the end of September is 7,458 GL (80 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 26 September 2019

Storage	Full Supply Volume	Current Volume		South Australian Private Carryover Volume	
	GL	GL	%	GL	
Dartmouth Dam	3,856	2,246	58	102	
Hume Dam	3,005	1,265	42	0	
Lake Victoria	677	577	85	0	
Menindee Lakes	1,731	13	1	0	
Total	9,269	*4,101	44	102	

<sup>\*</sup> 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 three months from October to December 2019 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).

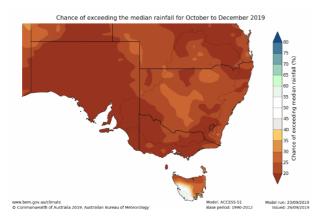
The El Niño–Southern Oscillation (ENSO) is currently neutral. The latest outlooks from the surveyed models suggest that ENSO-neutral is the most likely scenario for the remainder of 2019 and into 2020. The Indian Ocean temperature is likely to be the key influence on Australia's climate during the coming months. The positive IOD (Indian Ocean Dipole) remains active and is likely to maintain strong positive IOD index values until at least the end of spring.

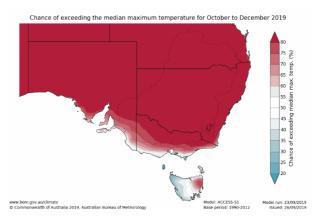
A positive IOD typically means below average winter and spring rainfall for much of southern and central Australia. IOD events are unable to form and, therefore, unable to influence Australian climate during the summer months, once the monsoon trough transitions into the southern hemisphere. Therefore, the prolonged dry signal over Australia resulting from the positive IOD is likely to weaken during summer.

The positive IOD remains a key climate driver of Australian climate for the coming months. A prolonged period of negative SAM (Southern Annular Mode) is also forecast, which at this time of the year typically acts to enhance the drier signal across parts of eastern Australia.

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), October-December 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 are 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		
1 October 2019		Projected Allocation as %				
Exceptionally dry - 99% likelihood allocation will be at least	87	88	97	100		
Extreme dry conditions - 95% likelihood allocation will be at least	87	93	100	100		
Very dry conditions - 90% likelihood allocation will be at least	87	96	100	100		
Dry conditions - 75% likelihood allocation will be at least	87	99	100	100		
Average conditions - 50% likelihood allocation will be at least	87	100	100	100		
Wet conditions - 25% likelihood allocation will be at least	87	100	100	100		

Based on data provided by MDBA on 25 September 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.



<sup>\*</sup>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) 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 OCT NOV JAN FEB MAR APR MAY \* Based on the volume of water held in River Murray Storages at 27 September 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 15 October 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:

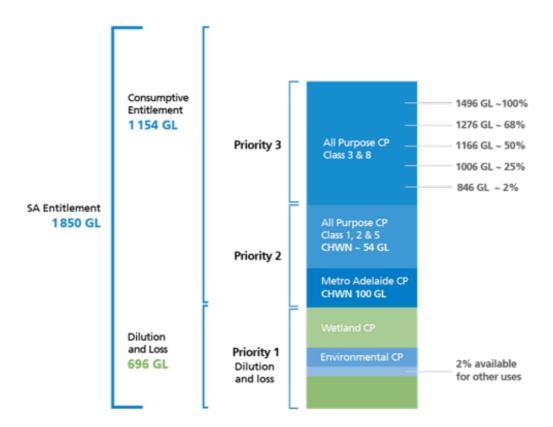
- Dr Ashley Kingsborough, Principal Policy Adviser
   T: (08) 8463 7991
- Mr Jarrod Eaton, Manager Water Delivery
   T: (08) 8463 7927

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\*



<sup>\*</sup> 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.