South Australia's River Murray Water Allocation Statement

Issued 15 June 2020

Key Messages

- The opening allocation for South Australian River Murray water is 40 percent.
- The updated projections indicate that even if an extreme dry scenario plays out over the next six months, South Australian Class 3 (High Security) allocations are projected to reach 100 per cent by November 2020. In other words, allocations are projected to reach 100 per cent if inflow conditions in 2020-21 correspond to or are better than the worst five per cent of years in the recent historical record.
- Increased inflows across the River Murray System have resulted in South Australia's minimum River Murray Entitlement increasing to 1,105 gigalitres (GL), providing a positive start for the 2020-21 water year.
- The Bureau of Meteorology's three month outlook indicates further rainfall is likely over the coming months. Most inflows to the River Murray system historically occur between July and November. This should provide water users with a degree of confidence that we will see further improvements to South Australia's water availability for 2020-21.
- Given the 100 per cent limit on combined allocations and carryover against entitlement, it is important that water users take into account the updated projections when considering their private carryover strategy for the 2020-21 water year.

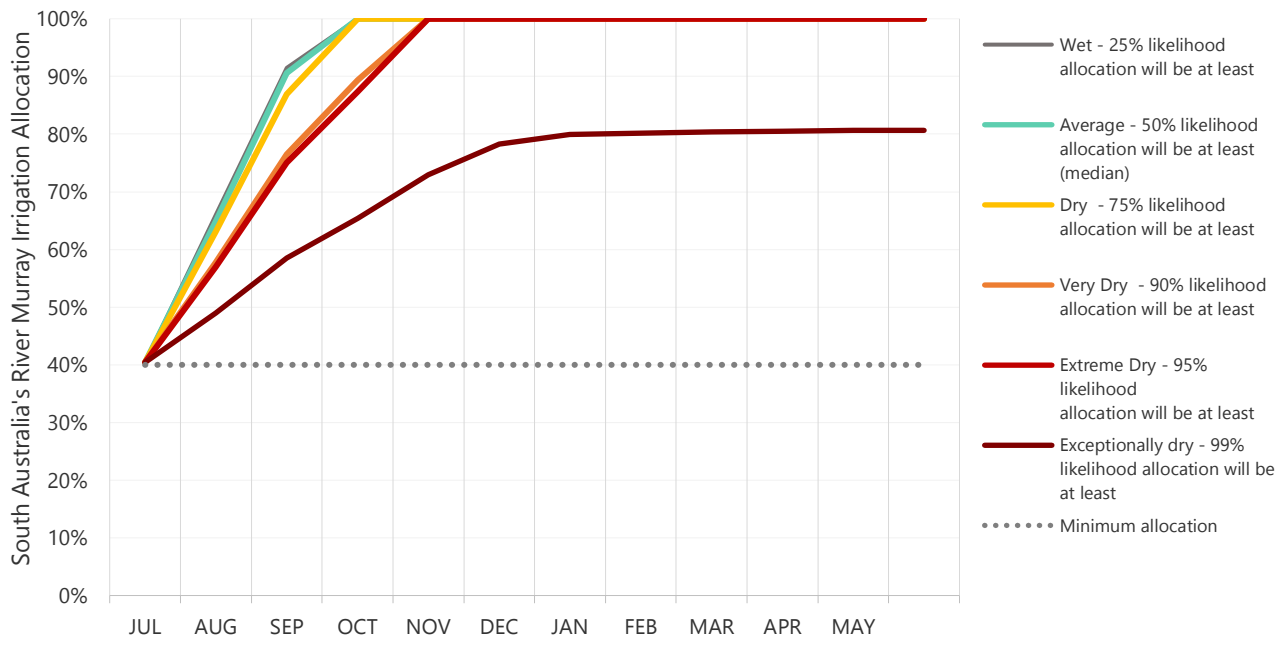
Table 1 – Minimum opening allocations for 2020-21 assuming 1,105 GL Entitlement, as at 15 June 2020.

Water Product	Projected Minimum Opening Allocation
All Purpose - Class 1 (stock and domestic)	100%
All Purpose - Class 3 (High Security)	40%
All Purpose - Class 5 (industrial and dairy)	100%
All Purpose - Class 8 (environmental land management)	40%

Water availability projections

Water availability projections help water users better understand the likelihood of future water allocations and provide a guide about future allocation increases based on River Murray system modelling and South Australia's River Murray Water Allocation Framework. By comparing allocation forecasts to the climate outlook, water users can make informed choices for planning purposes, depending on the level of risk they are comfortable with.

The reliability of the water availability projections will generally improve as the forecast period reduces. These projections are best estimates only and not guaranteed water availability. They should be used with caution, particularly when projecting many months ahead. 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. It also assumes a worst case actual opening allocation (40 percent for Class 3 (High Security) and Class 8). The range of water availability conditions included in the table and graph (see Figure 1 and Table 2) are based on historical variability in rainfall and temperature, in combination with current policy and operational settings.



* Based on the volume of water held in River Murray Storages at end-May 2020

This data is provided for information only. Historical performance not necessarily an indicator or 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 or reliance on any of this data or information

Figure 1 - Projected water allocation scenarios under a range of water availability conditions for SA River Murray entitlements (Class 3 (High Security) and Class 8) | 15 June 2020

Table 2 - Projected water allocation scenarios under a range of water availability conditions for SA River Murray entitlements (Class 3 (High Security) and Class 8) | 15 June 2020

SA River Murray Irrigation Allocation Scenarios Class 3 (High Security) | June 2020	1 Jul 2020 Opening Allocation	1 Sep 2020	1 Nov 2020	1 Jan 2021	1 Apr 2021
	Projected Allocation as a Percentage				
Exceptionally dry - 99% likelihood allocation will be at least	40	58	72	79	80
Extreme dry conditions - 95% likelihood allocation will be at least	40	75	100	100	100
Very dry conditions - 90% likelihood allocation will be at least	40	76	100	100	100
Dry conditions - 75% likelihood allocation will be at least	40	86	100	100	100
Average conditions - 50% likelihood allocation will be at least	40	90	100	100	100
Wet conditions - 25% likelihood allocation will be at least	40	90	100	100	100

Correct as of 15 June 2020. Based on the volume of water held in Murray-Darling Basin storages at the end of May 2020.

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.

Definitions: Based on modelling of water availability that simulates historical variability in rainfall and temperature, in combination with current policy and operational settings:

Exceptionally dry	There is a 99% likelihood your allocation will exceed the allocation in this scenario.
Extreme dry	There is a 95% likelihood your allocation will exceed the allocation in this scenario.
Very dry	There is a 90% likelihood your allocation will exceed the allocation in this scenario.
Dry	There is a 75% likelihood your allocation will exceed the allocation in this scenario.
Average	There is a 50% likelihood your allocation will exceed the allocation in this scenario.
Wet	There is a 25% likelihood your allocation will exceed the allocation in this scenario.

Private Carryover

Private carryover will be available for eligible water users in the 2020-21 water year. This means that an individual may carryover allocation volumes that are available to them and not used by the end of the 2019-20 water year, up to 20 percent of the volume of their Class 3 (High Security) entitlement.

The existing 100 percent limit on the combined allocation and carryover volumes granted under Class 3 (High Security) entitlements will continue to apply in 2020-21. However, under a rule change that applies from 1 July 2020, allocation volumes that would otherwise be granted above this 100 percent limit will be 'rolled over' into 2021-22 if carryover is triggered for that year (i.e. if the first minimum opening allocation announced in April 2021 is 50 percent or less). For example, if you have carried over 20 percent of your allocation, any improvements above 80 percent in 2020-21 will go into your rollover account. Rollover volumes would only be available if carryover is then triggered for 2021-22.

Note: It is important that water users take into account the updated projections when considering their private carryover strategy for the 2020-21 water year.

Further information on the new carryover policy is available here.

Water Allocation Framework

The Water Allocation Plan for the South Australian River Murray Prescribed Watercourse 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. Figure 2 (below) illustrates how water is prioritised and provides a guide as to how allocations will change with improvements in South Australia's River Murray Entitlement.

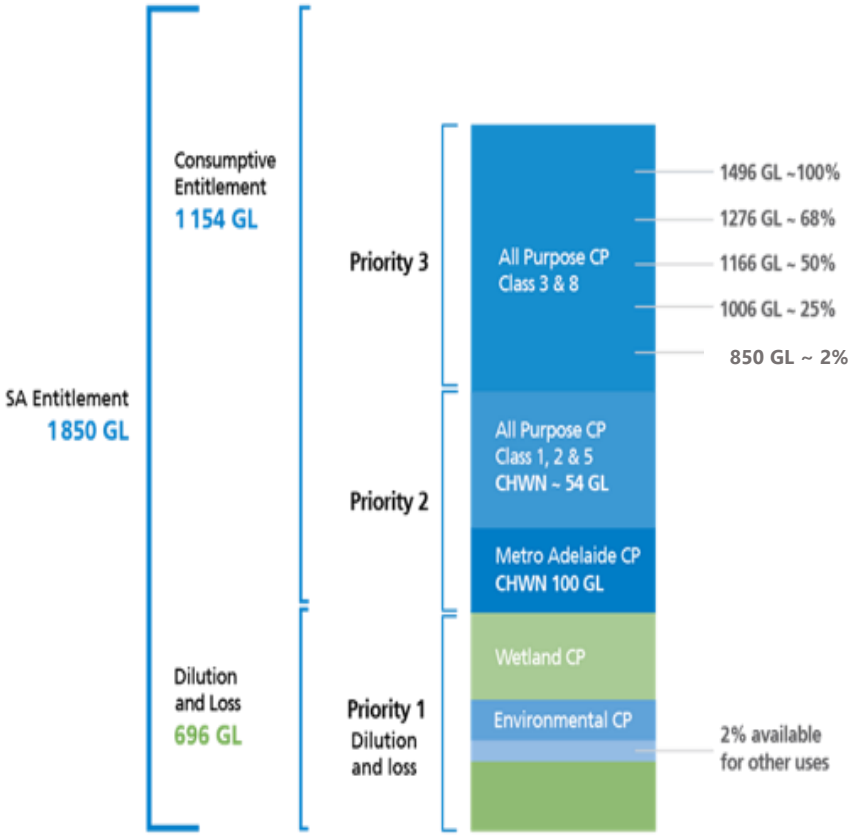


Figure 2: 2019 River Murray Water Allocation Plan's allocation framework

Water held in storage

At the end of May 2020 there was 3,602 GL (39 percent of capacity) held in Murray-Darling Basin Authority (MDBA) controlled storages. This is 4 percent more than the same time last year, but significantly less than the long-term average held in storage at the end of May of 5,728 GL (62 percent of total capacity). 101.4 GL of water is currently held in storage for South Australian private carryover.

Table 3 - Water held in Murray-Darling Basin storages at the end of May 2020

Storage	Full Supply Volume	Current Volume		SA Private Carryover Volume
	GL	GL	%	GL
Dartmouth Dam	3,856	1,944	50	101.4
Hume Dam	3,005	788	26	0
Lake Victoria	677	395	58	0
Menindee Lakes	1,731	475	27	-
Total	9,269	3,602	39	101.4

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

Climate outlook

The Bureau of Meteorology's mid-range rainfall outlook across the Murray-Darling Basin shows around a 60-75% chance that much of southern and inland eastern Australia will be wetter than average for the three months from July to September 2020 (Figure 3). While recent rainfall over parts of eastern Australia has eased the dry conditions in many areas, long-term rainfall deficiencies remain in many regions. Several months of above average rainfall may be required to increase stream flows and replenish water storages. There is a roughly equal chance of warmer or cooler winter days across the south-western Murray-Darling Basin, with an increased chance of warmer days for the rest of the Basin (Figure 4).

Warmth in the tropical eastern Indian Ocean has eased in recent weeks. However, sea surface temperatures remain warmer than average to the northwest of Australia. As a result of these changes, the influence of the Indian Ocean on Australia's July-September outlook has eased, with some models reducing their chances of a negative Indian Ocean Dipole (IOD) forming during winter. A negative IOD typically results in above-average winter–spring rainfall over parts of southern Australia as the warmer waters off northwest Australia provide more available moisture to weather systems crossing the country.

The El Niño–Southern Oscillation (ENSO) is likely to remain neutral over winter, though further cooling in the central and eastern tropical Pacific is expected, and a La Niña-like pattern (though possibly not reaching official threshold magnitude) may emerge. Some models suggest La Niña thresholds may be met by the end of winter. The longer-term wetter outlook for parts of Australia may reflect this influence. The Bureau's *ENSO Outlook* remains at INACTIVE, but if more cooling occurs it may be lifted to La Niña WATCH. La Niña is typically associated with an increased likelihood of above average winter-spring rainfall across southern and eastern Australia.

For more information on seasonal rainfall and temperature outlooks please visit the BoM website.

Figure 3 - Bureau of Meteorology seasonal outlook. Rainfall, July-September 2020

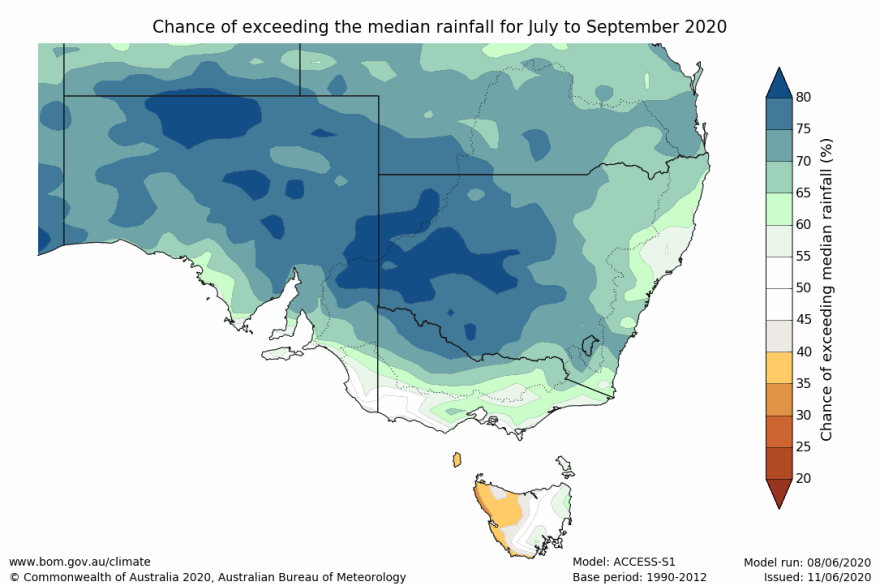
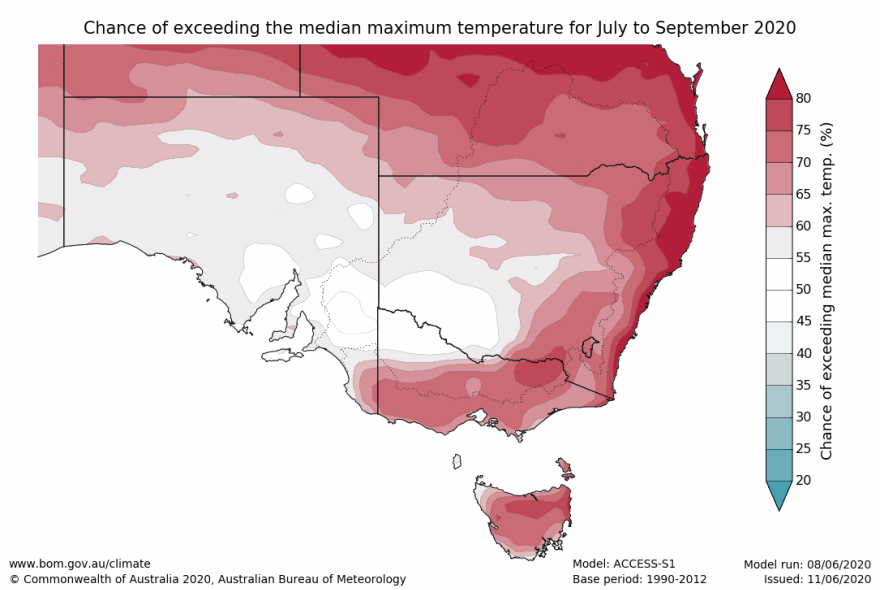


Figure 4 - Bureau of Meteorology seasonal outlook. Temperature, July-September 2020



Next announcement

The next announcement will be provided on **Wednesday 1 July** 2020. Updated water allocation information will be provided every two weeks while water allocations are less than 100 percent.

Further Information

For more information on South Australia's water allocations or to sign up to receive the weekly River Murray Flow Report:

- Visit the DEW website
- Email DEW:RiverMurrayOps@sa.gov.au

To speak with someone about your water allocation or account:

- Call the water licensing office on (08) 8595 2053
- Email water licensing on DEW.WaterLicensingBerri@sa.gov.au