

14 November 2019

## Lachlan Valley

### Water allocation update

There is **no change** to allocations in the Lachlan regulated river water source. Inflow conditions remain well short of enabling further general security allocation, with over 377 gegalitres (GL) of system inflow required in November. The planning horizon for the Lachlan resource assessment runs through to May 2022, some 30 months. It shows that significant inflows are required to build for higher priority water security before the next general security water can be allocated.

An indicative outlook on water availability for the rest of the 2019-20 water year is given below.

Inflows to Wyangala Dam in the 27 months since the last allocation in August 2017, have been approximately 253 GL. System inflows this water year have been critically low at just 9 GL.

The department is currently investigating options to ensure all remaining supplies are properly prioritised and used as efficiently and effectively as possible should drought conditions persist into 2020-21.

Flows in the regulated Willandra Creek will be maintained until the end of November 2019. They will likely stop over summer until the end of March 2020 as an emergency water savings measure.

A Temporary Water Restriction under Section 324 of the *Water Management Act 2000* is currently in place. Access to 43 per cent of the 1 July general security water is restricted. The restriction is to improve water security for higher priority needs, including towns. All water users are encouraged to be as efficient as possible with remaining account water to stretch the resource until rains return.

As Lake Brewster remains effectively empty, irrigation and environmental demand below Brewster Weir this water year is being delivered from Wyangala Dam. In ordering water, users must be mindful of additional travel times and delivery challenges, particularly those below Hillston.

The Annual Use Limit this year (2019-20) is a volume equivalent to 100 per cent of entitlement.

2019-20	High Security	General Security	Drought Stage
Lachlan	87%	0%	 Stage 3

### Storage levels (as at 13 November 2019)

- Wyangala Dam is 17 per cent full – falling – currently at about 208 GL.
- Lake Cargelligo is 50 per cent full – falling – currently at about 22 GL.
- Lake Brewster is effectively empty.

### Drought stage

The NSW Extreme Events Policy introduced a staged approach to managing extreme events, such as severe droughts or poor water quality events. The Lachlan regulated river water source is now at Stage 3 drought criticality, reflecting the reduced water availability in 2019-20 described above. Conditions are being closely monitored going forward, with Stage 4 and tighter restrictions a possibility if conditions deteriorate significantly beyond current expectations.

Further information on the NSW Extreme Events Policy and drought stages can be found at: [www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events](http://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events)

### Climatic outlook

The Bureau of Meteorology seasonal outlook for November 2019 to January 2020 indicates that the Lachlan catchment is likely to experience drier than average conditions across the catchment. Daytime temperatures over this period are very likely to be above average. The Bureau indicates that the El Niño-Southern Oscillation (ENSO) will remain neutral until early 2020. Positive Indian Ocean Dipole (IOD) conditions are forecast for the remainder of spring and early summer. A positive IOD will likely result in below average rainfall and above average temperatures.

For further details: [www.bom.gov.au/climate/outlooks/#/rainfall/summary](http://www.bom.gov.au/climate/outlooks/#/rainfall/summary)

### Next announcement

The next water allocation statement for the Lachlan regulated river water source will be issued on **Monday 16 December 2019**.

# Water Allocation Statement

Water availability and allocation update

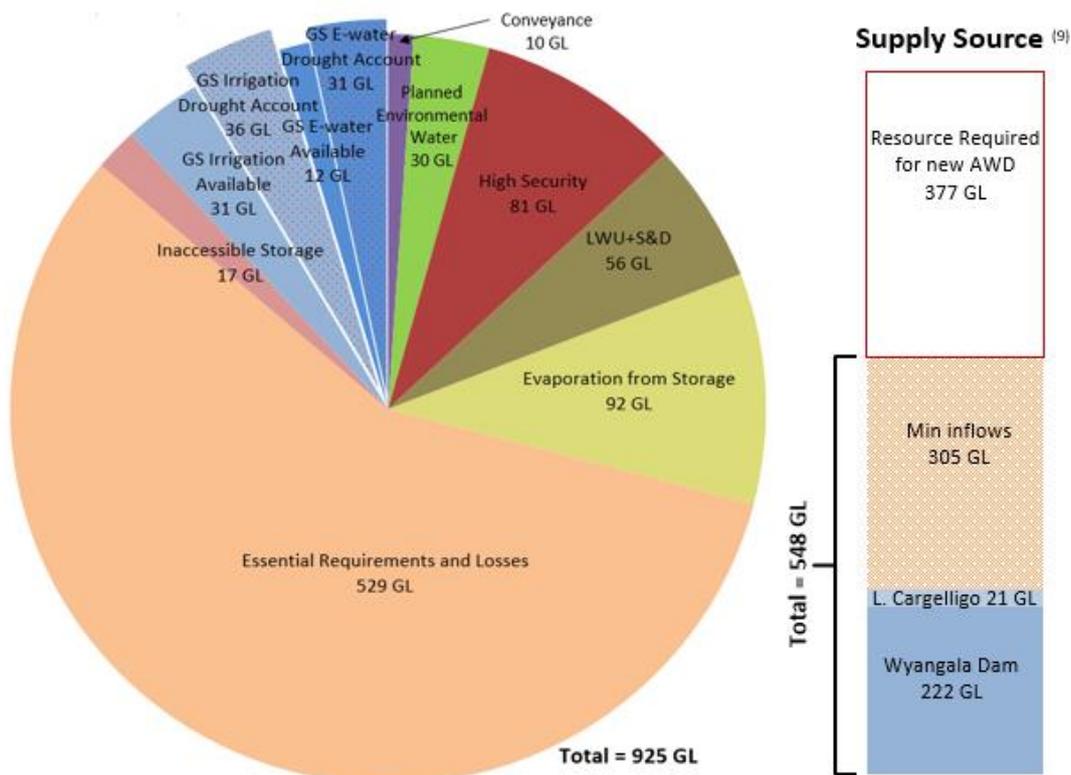


## Lachlan Resource Assessment Data Sheet

Resource Distribution (November 2019 to May 2022)	Volume (GL)	Volume (GL)
Available Resource <sup>(1)</sup>		548
<i>less</i>		
General Security 2019/2020 AWD <sup>(7),(8)</sup>	0 (0%)	
Carryover remaining in accounts <sup>(2),(8)</sup>	110	
Conveyance	10	
Planned Environmental Water <sup>(3)</sup>	30	
High Security <sup>(4)</sup>	81 (87%)	
Towns, Stock, Domestic <sup>(4)</sup>	56 (100%)	
Evaporation from storage <sup>(5)</sup>	92	
Essential Requirements and Losses (transmission, operations) <sup>(6)</sup>	529	
Inaccessible storage	17	
<i>equals</i>		
Water available for allocation (or deficit)		(377)

### Resource Distribution: November 2019 to May 2022

#### Lachlan Valley



### Notes:

- (1) Total available resource: End of October 2019 storage volume in Wyangala Dam, Lake Cargelligo and Lake Brewster, plus minimum forecast inflows from now to May 2022.
- (2) Carryover remaining in general security accounts, including held environmental water. Due to a temporary water restriction currently in force only 57% of this volume is available for delivery.
- (3) Planned environmental water: water allocated to the Water Quality Allowance and/or the Environmental Contingency Allowances (EWA) under the water sharing plan. 30 GL (10 GL per year to May 2020) is currently set aside. Excludes 'licence-based' environmental water. EWA allocation for 2019-20 is zero at this time.
- (4) Towns, Stock, Domestic and High Security: reserves are set aside to meet 100% of these high priority entitlements to 31 May 2022. Balances in high security accounts include water traded in from general security licences.
- (5) It is assessed that the lakes are likely to be drawn down slowly over the assessment period, increasing storage evaporation.
- (6) Essential Requirements and Losses: best estimate of the volume required to run the river under dry conditions through to May 2022 to meet all demands. This mostly comprises natural transmission losses as water soaks into river bed sands. The volume includes any S&D replenishment deliveries required in autumn 2020, 2021, and 2022. It is assumed that any current tributary inflows will return to dry conditions going forward. The loss allowance is updated regularly.
- (7) Volume represents the total cumulative AWD made to GS licences in the current water year.
- (8) Held environmental water (HEW): held environmental water administered by environmental water holders is being reported here, with the associated portion of general security allocation also identified in the above pie chart. This reporting is indicative only, prior to reconciliation of usage and net trade, and is estimated to be 43GL of GS, and 2GL of HS. These reported entitlements are managed by environmental holder groups, including the NSW DPIE - Environment, Energy and Science (EES) and the Commonwealth Environmental Water Holder (CEWH). Details on e-water holdings can be found on individual agency websites.
- (9) The supply source of total available water, explained in Note (1) above, is provided. Note that Lake Brewster is empty now. It also indicates the current shortfall required before a further AWD can be made.

### Water availability outlook for remainder of the 2019-20 water year

Forecast conditions are indicative only and not guaranteed. Forecasts should be used with caution and can change, particularly when the projection is many months ahead.

- The resource assessment process is based on the worst period of low inflows prior to the water sharing plan commencing in 2004. This excludes the Millennium drought, which contained the lowest Lachlan inflows on record. Planning for the second worst drought slightly increases the risk that current allocations are too high and that future water restrictions may be needed.
- The system continues to experience very low inflows, with only 9 GL of inflow so far this water year. A plot of inflows received in recent years, compared to those required to guarantee delivery of remaining carryover, is provided on the final page of this statement.
- Conditions will be closely monitored through the summer months. Water users are encouraged to be as efficient as possible with remaining account water.
- Although allocations are based on the second worst drought historically in the Lachlan, contingency planning and managing for drought is undertaken on more severe drought scenarios. Stage 4 contingency measures are currently being investigated and may be implemented early next year under a zero inflow scenario.
- A storage level of at least 5 per cent in Wyangala Dam at 30 June 2020 will be targeted and maintained to provide for critical needs going forward under Stage 4 drought operations. Significant inflow is required to build and protect reserves for future critical water delivery.

- Flows in the regulated Willandra Creek will be maintained until the end of November 2019. From 1 December to the end of March 2020 they will likely cease as an emergency water savings measure.
- If restrictions are in place and sufficient inflows occur, the improvement in resource will be shared to increase the availability of carryover and high security allocation, after first ensuring essential supplies can be met in 2020-21. The relaxation of restrictions this water year is dependent on the size and timing of inflows to storage.
- A table has been provided below with estimated inflows required in the coming months before access to carryover water can improve in 2019-20. The aim is to assist water users with their management decisions, including planning for the current water year.

The table below summarises the drought planning scenarios. Scenario estimates are based on applying priorities under the *Water Management Act 2000*, leading to lower priority licences being impacted to the same extent or greater than higher priority licences. Please note; that all values are estimates, subject to change, and will be updated in monthly water allocation statements.

### Inflows needed to improve deliverability of carryover

2019-20 inflow period	Estimated cumulative inflow required prior to easing of restrictions (GL)	Inflows received since 1 July 2019 (GL)	Additional inflows required to increase GS delivery to 75% and increase HS allocation to 92% (GL)	Additional inflows required for new GS AWD (GL) (no restrictions)
By end of November	157	9	191	377
By end of December	162	9	195	
By end of January	165	9	198	
By end of February	166	9	198	

Notes: Estimated water held in general security accounts on 1 July 2019 was 155,000 ML. Water delivery operations in 2019-20 provided under drought contingency planning (Stage 3). Minimum storage level of 5% is targeted at end 2019-20 water year to maintain critical supplies in 2020-21 and beyond.

## Inflows received this water year

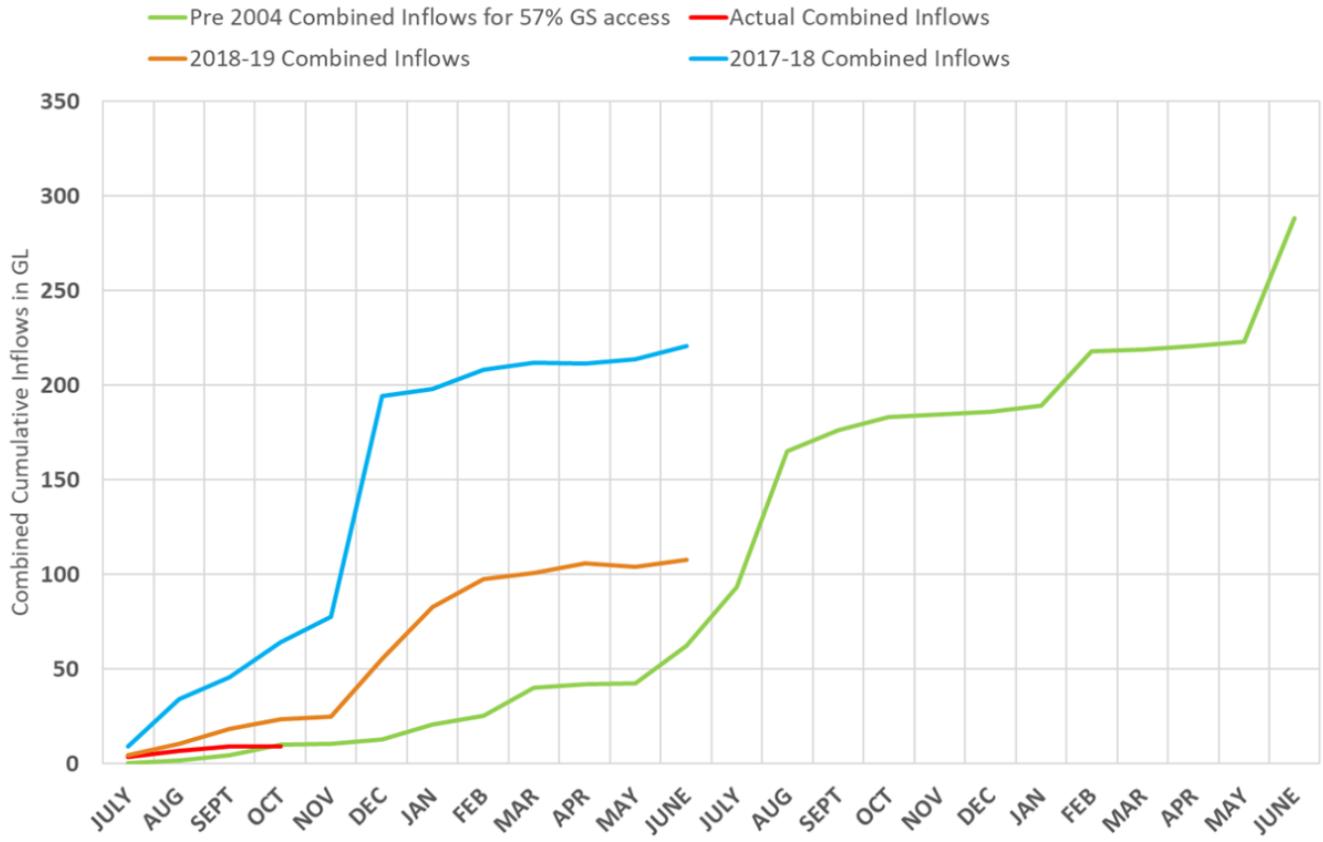


Figure 1: Inflows into Wyangala Dam plus useful tributary contribution. Compares the combined inflow received so far this year (red) and recent years, with the historical minimum (green).

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