

15 October 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 332 gigalitres (GL) of system inflow required in October. The planning horizon for the Lachlan resource assessment runs through to May 2021, some 20 months. It shows that significant inflows are required to build for critical water delivery before further general security water can be allocated.

Inflows to Wyangala Dam in the 26 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. As a result the department must look to implement further contingency measures to save water.

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. An indicative outlook on water availability for 2019-20 has been provided further below.

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. The restriction requires 43 per cent of the 1 July account balance of general security access licences to be placed into a drought sub-account where it cannot be used or traded until conditions improve. However, conditions are being closely monitored and tighter restrictions may become necessary if inflows continue to fail. Water users should consider the risk of increased restrictions when planning for this year's summer crop. The restriction is to improve water security for high priority needs, including towns, and is consistent with the NSW Extreme Events Policy.

As Lake Brewster remains effectively empty, irrigation and environmental demand below Brewster Weir this water year will be delivered from Wyangala Dam. In ordering water, users must therefore allow for the extra delivery travel times, particularly those below Hillston and in Willandra Creek.

General security water users are reminded that the Annual Use Limit for the 2019-20 water year 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 14 October 2019)

- Wyangala Dam is 20 per cent full – falling – currently at about 240 GL.
- Lake Cargelligo is 54 per cent full – steady – currently at about 23 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 will be closely monitored going forward with Stage 4 and tighter restrictions potentially required should 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/update

Climatic outlook

The Bureau of Meteorology seasonal outlook for October to January suggests rainfall is likely to be below average across most of the country.

In the shorter term, October is showing particularly strong chances of being much drier than usual.

The positive Indian Ocean Dipole (IOD) remains a key climate driver of Australian climate for the coming months. This, combined with a forecast negative Southern Annual Mode (SAM) phase, is driving the warm and dry conditions forecast by the Bureau's climate model.

For further details: www.bom.gov.au/climate/outlooks/#/rainfall/summary

Next announcements

The next water allocation statement for the Lachlan regulated river water source will be issued on **Thursday 14 November 2019**.

Water Allocation Statement

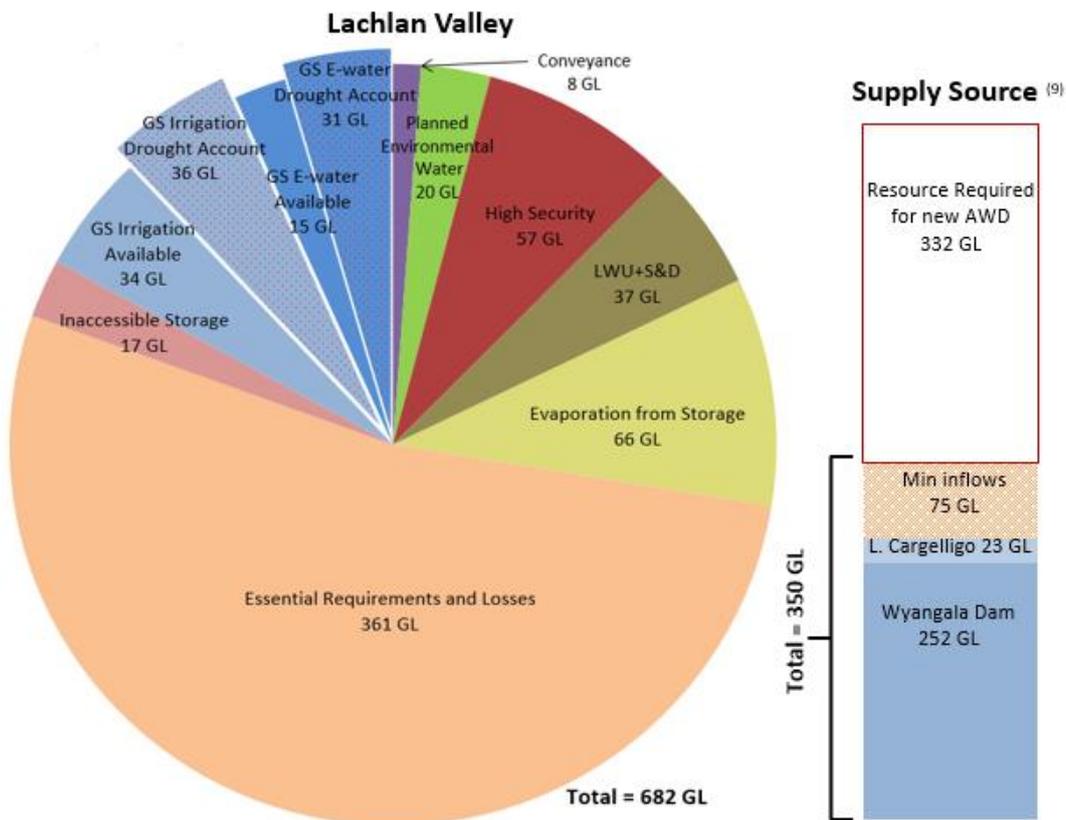
Water availability and allocation update



Lachlan Resource Assessment Data Sheet

Resource Distribution (October 2019 to May 2021)	Volume (GL)	Volume (GL)
Available Resource ⁽¹⁾		350
<i>less</i>		
General Security 2019/2020 AWD ^{(7),(8)}	0 (0%)	
Carryover remaining in accounts ^{(2),(8)}	116	
Conveyance	8	
Planned Environmental Water ⁽³⁾	20	
High Security ⁽⁴⁾	57 (87%)	
Towns, Stock, Domestic ⁽⁴⁾	37 (100%)	
Evaporation from storage ⁽⁵⁾	66	
Essential Requirements and Losses (transmission, operations) ⁽⁶⁾	361	
Inaccessible storage	17	
<i>equals</i>		
Water available for allocation (or deficit)		(332)

Resource Distribution: October 2019 to May 2021



Notes:

- (1) Total available resource: End of September 2019 storage volume in Wyangala Dam, Lake Cargelligo and Lake Brewster, plus minimum forecast inflows from now to May 2021.
- (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. 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 2021. 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 2021 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 and 2021. 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 46GL of GS, and 4GL of HS. These reported entitlements are managed by environmental holder groups, including the NSW Office of Environment and Heritage (OEH) 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 2019-20

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 these 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 and increased restrictions may become necessary this water year should extreme low inflows persist. Customers should consider the risk of further restrictions when planning this year's summer crop.
- 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% in Wyangala Dam 30 June 2020 will be targeted and maintained to provide for critical needs next water year under Stage 4 drought operations. Significant inflow is now required to build reserves for critical water delivery in the 2020-21 water year.

- 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. A relaxation of restrictions this water year is dependent on the 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 *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 October	150	9	183	332
By end of November	157	9	191	
By end of December	162	9	195	
By end of January	165	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.

Inflows received this water year

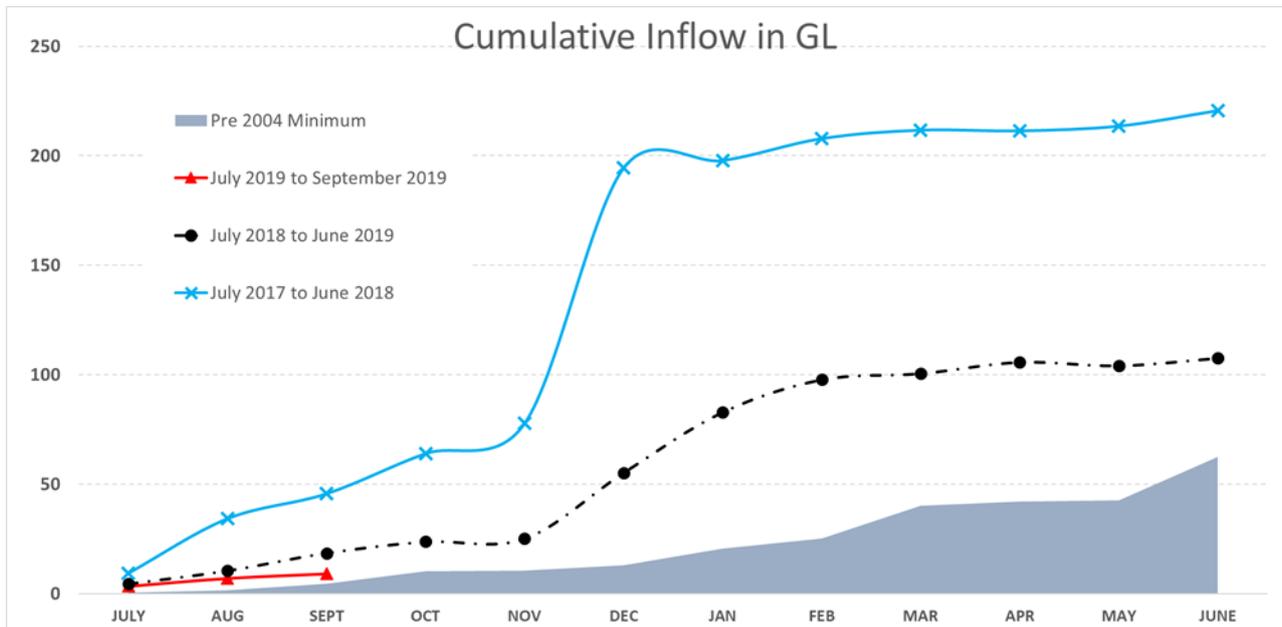


Figure: Inflows into Wyangala Dam plus useful tributary contribution. Compares the combined inflow received so far this year (red) and recent years, with the historical minimum (in-filled).

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