

15 January 2020

Lachlan Valley

Water allocation update

There is no change to allocations in the Lachlan regulated river water source. A large system inflow, over 419 gigalitres (GL), is required before more general security water can be allocated. The planning horizon for the Lachlan resource assessment runs through to May 2022, some 28 months. Given the current deficit, significant inflows are required to build for higher priority water needs before the next improvement to general security allocation.

Inflows to Wyangala Dam in the 29 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, with zero inflow to Wyangala Dam since October 2019. The Department is investigating and implementing options to ensure all remaining supplies are prioritised and used as efficiently and effectively as possible should drought conditions persist into 2020/21.

A Temporary Water Restriction under Section 324 of the *Water Management Act 2000* currently limits access to 43 per cent of the 1 July general security water account balance. The restriction is improving 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.

Drought contingency measures are being implemented to enable the delivery of usable allocations to 31 March 2020 without needing to further restrict general security access. Depending on what happens over the peak demand period, more drought measures may be required beyond March 2020 to prevent Wyangala Dam storage falling below critical levels this water year. These measures will ensure critical water needs including Local Water Utility supplies can be maintained into the 2020-21 water year.

Flows in the regulated Willandra Creek have now ceased for summer as an emergency water savings measure. Further potential contingency measures are detailed on the following page.

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.

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

Storage levels (as at 13 January 2020)

- Wyangala Dam is 10.7 per cent full – falling – currently at about 131 GL.
- Lake Cargelligo is 50.3 per cent full – steady – 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 (Severe Drought) criticality, reflecting the reduced water availability in 2019-20 described above. Conditions are being closely monitored going forward with Stage 4 (Critical Drought) and tighter restrictions a possibility if conditions deteriorate significantly beyond current expectations.

Some of the current and planned drought contingency measures for the Lachlan Regulated River Water Source are as follows:

Drought contingency measures for the Lachlan valley

Measure	Details	Potential Savings
No further replenishment flows	Stock and domestic replenishment flows have already been delivered to creeks in the lower Lachlan.	24 GL
Flows ceased to Willandra Creek	Regulated flows to Willandra Creek ceased till March 2020	4 GL
End of system flows reduced	Operating the lower end of the system at low flow targets to improve efficiency.	3 GL
Flows ceased to Lake Cargelligo	Inflows to lake will cease in March 2020 after accommodating the peak tourism season.	4 GL
Booberoi Creek operations	The combination of environmental releases and low flows will lead to some efficiency savings.	1-3 GL
Flows reduced to Wallamundry Creek system	Creek system will operate at low levels due to low main river levels and an inability to divert into the creeks.	3 GL
Conservative use of the water quality allowance	The allowance will only be used if critical water quality risks emerge this summer.	10 GL

Further information on critical valleys in drought can be found at:

www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/critical-valleys-in-drought

Climatic outlook

The Bureau of Meteorology seasonal outlook for February to April 2020 shows no strong tendency towards either wetter or drier than average conditions for the catchment, with day and night temperatures likely to be above average. While outlooks for drier than average conditions have eased compared to those issued for late 2019, several months of above average rainfall would be needed to see a recovery from current long-term rainfall deficiencies.

The Bureau indicates that the El Niño-Southern Oscillation (ENSO) remains neutral. The ENSO is likely to remain neutral into winter. The Indian Ocean Dipole (IOD) has returned to neutral from a very strong positive IOD event, and will remain so for the coming months.

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

Water Allocation Statement

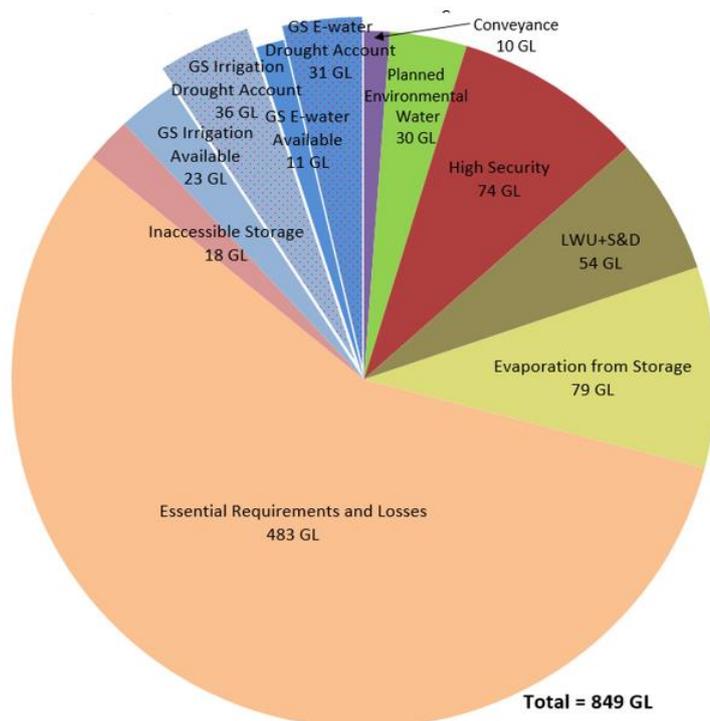
Water availability and allocation update



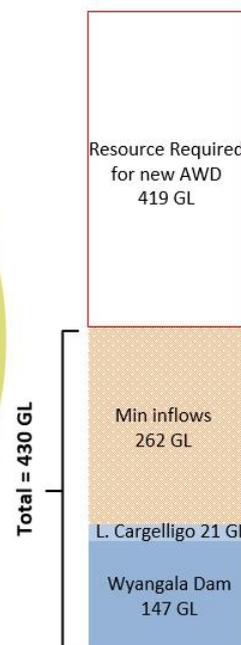
Lachlan Resource Assessment Data Sheet

Resource Distribution (January 2020 to May 2022)	Volume (GL)	Volume (GL)
Available Resource ⁽¹⁾		430
<i>less</i>		
General Security 2019/2020 AWD ^{(7),(8)}	0 (0%)	
Carryover remaining in accounts ^{(2),(8)}	101	
Conveyance	10	
Planned Environmental Water ⁽³⁾	30	
High Security ⁽⁴⁾	74 (87%)	
Towns, Stock, Domestic ⁽⁴⁾	54 (100%)	
Evaporation from storage ⁽⁵⁾	79	
Essential Requirements and Losses (transmission, operations) ⁽⁶⁾	483	
Inaccessible storage	18	
<i>equals</i>		
Water available for allocation (or deficit)		(419)

Resource Distribution: January 2020 to May 2022
Lachlan Valley



Supply Source ⁽⁹⁾



Notes:

- (1) Total available resource: End of December 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 2022 is currently set aside for WQA. 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 42GL of GS, and 1.4GL 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.

The table below summarises the inflow scenarios 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 January	175	9	208	419
By end of February	176	9	209	
By end of March	176	9	209	
By end of April	176	9	209	

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 the end of the 2019-20 water year to maintain critical supplies in 2020-21 and beyond.

Next announcements

The next water allocation statement for the Lachlan regulated river water source will be issued on **Friday 14 February 2020**

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