

14 December 2018

## Lachlan Valley

### Water allocation update

The Lachlan regulated river general security water allocation **remains unchanged at zero per cent of entitlement**. Inflows remain well short of being able to provide any general security allocation. For context, over 260 GL of system inflow is required in December, while just 8 GL has been received.

The planning horizon for the Lachlan resource assessment runs through to May 2021, some 30 months. It ensures continued commitment to priority needs before further general security is allocated. Valley-wide general security water availability is currently 273 GL, or about 46 per cent of entitlement.

As Lake Brewster is effectively empty, irrigation and environmental demand below Brewster Weir this summer will be delivered from Wyangala Dam. In order for the water order lead time to remain linked to travel time from Lake Brewster, WaterNSW will be in contact with water users below Brewster Weir, including those in regulated Willandra Creek, to compile details of their forecast monthly demand.

### Storage levels (as at 14 December 2018)

- Wyangala Dam is 45 per cent full – falling – currently holding 550 GL.
- Lake Cargelligo is 81 per cent full – falling – currently holding 30 GL.
- Lake Brewster is effectively empty.

2018-19	High Security	General Security	Drought Stage
Lachlan	100%	0%	 Stage 1

### Drought stage

The NSW Extreme Events Policy has been released for all surface and ground water sources in the NSW Murray Darling Basin. This introduces a staged approach to managing extreme events such as severe droughts or poor water quality events. Incident Response Guides (IRGs) are being developed for each valley as part of water resource plans to identify triggers and types of actions taken in each stage.

The Lachlan regulated river water source is assessed to be in Stage 1. There are no constraints to deliverability of account water forecast during the current water year. Water users will be informed via future water allocation statements of estimated inflow volumes required to ensure full deliverability of carryover in the 2019/20 water year.

An explanatory section on drought stages has been provided at the end of this statement.

## Climatic outlook

The Bureau of Meteorology is forecasting very low flow during the December 2018 to February 2019 period in the Abercrombie River which drains into Wyangala Dam.

The Bureau's seasonal outlook for December to February indicates that rainfall conditions are likely to be generally below average across the region. Temperatures are expected to be above average.

The Bureau's El Niño-Southern Oscillation (ENSO) Outlook remains at El Niño ALERT and a positive Indian Ocean Dipole (IOD) event persists, but is weakening. El Niño conditions continue to develop with some indicators reaching El Niño thresholds. El Niño conditions are likely to bring warmer than average temperatures for large parts of the continent, while a positive IOD typically has very little influence on Australia from December to April.

## Next announcements

The next water allocation statement for the regulated Lachlan valley will be on **Tuesday 15 January 2019**.

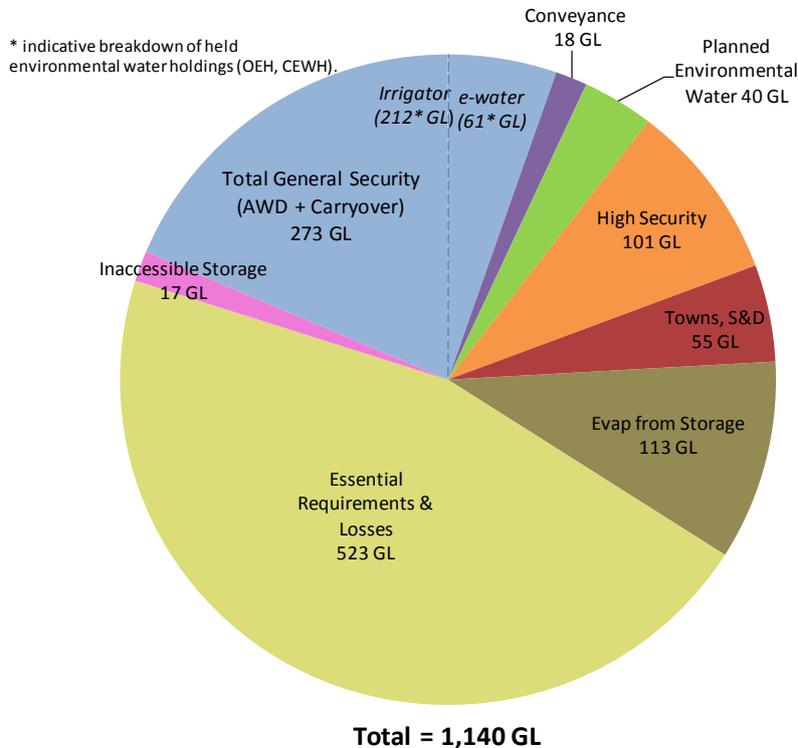
## Lachlan Resource Assessment Data Sheet

Resource Distribution (December 2018 to May 2021)	
	Volume (GL)
Available Resource <sup>(1)</sup>	873
<b>less</b>	
General Security 2018/2019 AWD <sup>(7),(8)</sup>	0 (0%)
Carryover remaining in accounts <sup>(2),(8)</sup>	273
Conveyance	18
Planned Environmental Water <sup>(3)</sup>	40
High Security <sup>(4)</sup>	101 (100%)
Towns, Stock, Domestic <sup>(4)</sup>	55 (100%)
Evaporation from storage <sup>(5)</sup>	113
Essential Requirements and Losses (transmission, operations) <sup>(6)</sup>	523
Inaccessible storage	17

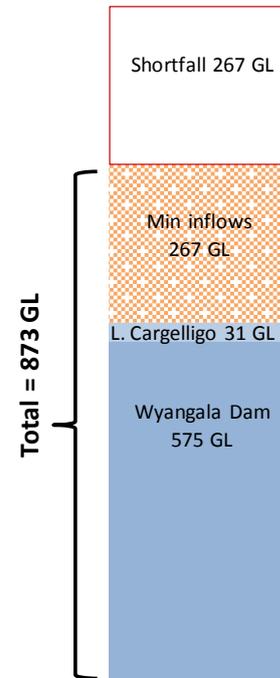
*\*See notes below.*

## Resource Distribution: December 2018 to May 2021

### Lachlan Valley



### Supply Source <sup>(9)</sup>



### Notes:

- (1) Total available resource: End of November 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.
- (3) Planned environmental water: water allocated to the Water Quality Allowance and/or the Environmental Contingency Allowances under the water sharing plan. Excludes 'licence-based' environmental water.
- (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 in the current water year, 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 S&D replenishment deliveries in autumn 2019, 2020, and 2021. It is assumed that 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 61 GL of GS, and 20 GL 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.

## Drought stage trigger levels

The drought stage is determined in accordance with critical trigger levels for this valley as outlined in the Lachlan Incident Response Guide developed by NSW Department of Industry-Water. A drought stage can range from Stage 1 (normal operations) to Stage 4 (critical drought). It is informed by routine water resource assessment results and is triggered by the degree to which water use priorities can be met within the water source. A summary of each drought stage is provided in the table below.

These drought stages are focused on the ability of the regulated river to deliver existing and high priority commitments within the valley. This is distinct from the drought phases determined by the NSW Department of Primary Industries in their Combined Drought Indicator, which is focused on categorising seasonal conditions based on rainfall, soil water, plant growth and drought direction for individual parishes in NSW.

For further details: [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)

## Drought stage trigger levels for surface water – general principles

Criticality	Evidence base for surface water	Broad intent of measures
<b>Stage 1</b> Normal management 	Can deliver all account water under normal river operations practices.	Provide certainty for water use planning.  Long term water security and emergency/drought contingency planning.
<b>Stage 2</b> Drought management 	Unable to deliver 100% of high priority account water <b>and</b> maximum expected use of general security under normal river operations practices.	Operational measures in the current water year to reduce transmission losses and prevent potential future failure to supply water in accounts.  Drought response readiness Local Water Utilities (LWUs).

Criticality	Evidence base for surface water	Broad intent of measures
<p><b>Stage 3</b></p> <p>Severe drought/water shortage</p> 	<p>Only able to deliver restricted high priority demands <b>and</b> restricted remaining general security account water.</p>	<p>Restricting access to account water, restricting trade, and suspending some Water Sharing Plan (WSP) rules in addition to increased operational measures to prevent potential future failure to supply water in accounts.</p> <p>Drought management/restrictions (LWUs).</p>
<p><b>Stage 4</b></p> <p>Critical drought/water shortage</p> 	<p>Only able to deliver restricted town water supply, stock and domestic and other restricted high priority demands.</p>	<p>Suspension of some WSP rules. Severe restrictions required to prioritise remaining supplies for critical human water needs.</p> <p>Emergency drought management measures/restrictions (LWUs).</p>