

13 January 2023

Lachlan Regulated River Water Source

Water availability and allocation update

There is no increase in allocation for general security entitlement holders this month. The current general security account balance is approximately 674 gigalitres (GL) or 113% of entitlement.

During December, the Lachlan catchment experienced average to below average rainfall.

This resource assessment is based on information as of 31 December 2022. Any changes in resources since that date will be captured in the next allocation statement.

Current allocation

2022/23	General Security Allocation	General Security Account Balance
Lachlan Regulated River	115%	~113%

Storage levels (as of 12 January 2023)

- Wyangala Dam is about 98% full – holding around 1,190 GL.
- Lake Cargelligo is about 120% full – holding around 43 GL.
- Lake Brewster is about 91% full – holding about 132 GL (31 December 2022).

Key information

- Water users are advised that there will be no account reset before 28 March 2023, six months after the last reset, regardless of whether Wyangala Dam again spills.
- Water users are reminded that the annual use limit of 100% of entitlement for general security entitlement holders applies for the 2022/23 water year, plus any adjustments for trade.
- December inflow to Wyangala Dam was about 37 GL and downstream tributary inflows were 128 GL. There is an estimated 120 GL of flows in transit upstream of Lake Cargelligo Weir, and about 59 GL of these tributary flows will be used to substitute required releases from Wyangala Dam to meet demands in January and keep Lake Brewster at around 135 GL (93%), to maximise Wyangala storage.
- Translucent flow obligations have been fully met for this water year, having reached the 350 GL limit in late July.

- With a potential drying outlook, the current airspace strategy is to keep the dam level at around 98% (1,190 GL) and monitor the short-term weather forecast and make pre-releases if required, as agreed by the Lachlan Airspace Reference Panel.
- Lake Cargelligo will be drawn down to approximately 22 GL (50%) by the end of March 2023 to resume the dam safety embankment upgrade.
- The November 2022 flood event has caused severe damage to numerous structures in the Lake Brewster system. WaterNSW is currently undertaking detailed impact assessment to estimate the severity of the damages and plan for repairs.
- The Water Quality Allowance (WQA) was used over a 10 day period to dilute poor quality water presenting with low dissolved oxygen levels resulting from water draining from the floodplains. The water would reduce the risk of native fish deaths in the Lachlan River in proximity to Jemalong Weir. Releases of 500 megalitres (ML)/day were made from Wyangala Dam from 1 to 10 January 2023, consuming a total 5 GL of the WQA. Conditions are being closely monitored and this usage will be reflected in the next assessment.

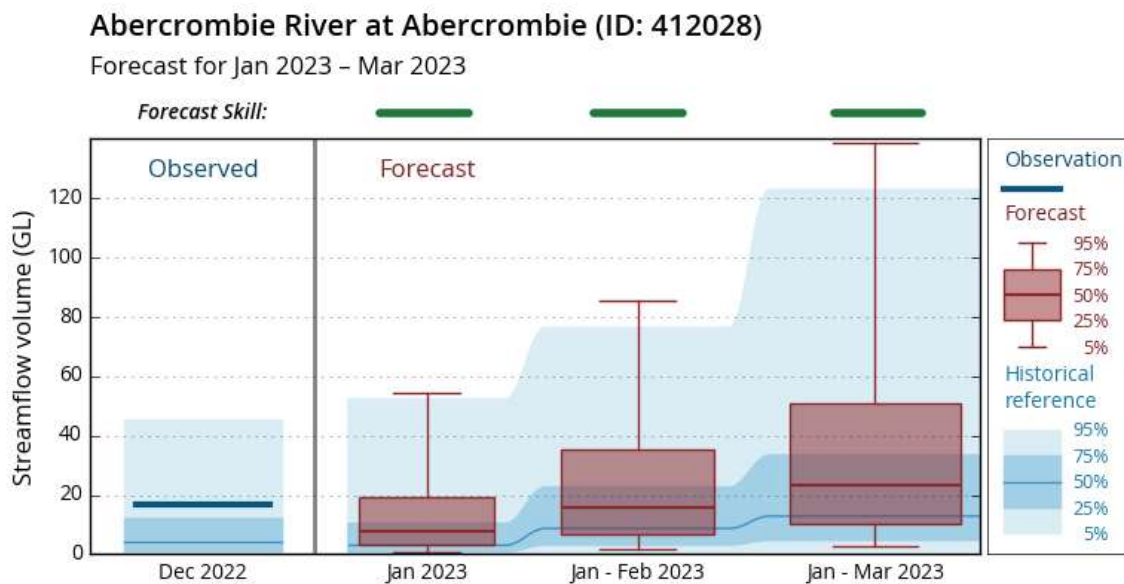
Seasonal climate and streamflow outlooks

The Bureau of Meteorology’s seasonal outlook for February to April indicates that rainfall will very likely be about median across the catchment. Daytime temperatures are likely to be about or warmer than the median, and overnight temperatures warmer than the median.

Further details at: www.bom.gov.au/climate/outlooks/#/overview/summary

The Bureau of Meteorology also issues a seasonal flow forecast for the Abercrombie River that drains into Wyangala Dam (see the figure below). This provides a forecast of potential storage inflows. All forecast quantiles of total flow volumes from January to March are higher than the historical flows, indicating flows to March are likely to be higher than historically over this period.

Further details at: www.bom.gov.au/water/ssf/#id=412028



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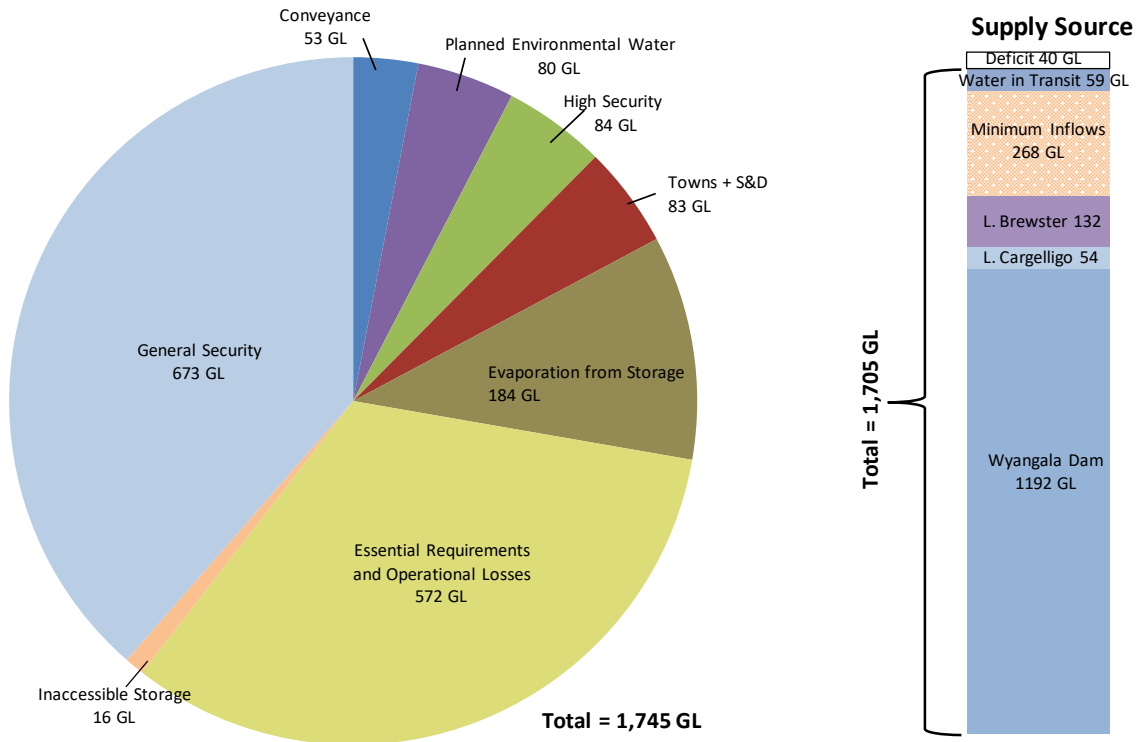
Lachlan resource assessment data sheet

Resource Distribution (January 2023 to May 2025)	Volume (GL)
Current and Future Resources ⁽¹⁾	1,705
<i>less</i>	
General Security account balance ⁽⁶⁾	673
Conveyance	53
Planned Environmental Water ⁽²⁾	80
High Security ^{(3) (6)}	84
Towns, Stock, Domestic ⁽³⁾	83
Evaporation from storage ⁽⁴⁾	184
Essential Requirements and Losses ⁽⁵⁾	572
Inaccessible storage	<u>16</u>
<i>Equals</i>	
Surplus (or deficit) ⁽⁷⁾	(40)

Notes:

- (1) End of December 2022 storage volume in Wyangala Dam, Lake Cargelligo, and Lake Brewster, and the planned minimum storage inflows and tributary flows from January 2023 to May 2025 and flows in transit.
- (2) Water allocated to the Water Quality Allowance (WQA) and the Environmental Water Allowances (EWA). The volume represents the balance of the allocated volumes to WQA and EWAs. The Wyangala and Brewster EWAs have been allocated 10 GL each for the 2022/23 and 2023/24 water years. In addition, 20 GL per year is allocated to the WQA for 2022/23 and 2023/24.
- (3) Towns, Stock, Domestic and High Security: reserves are set aside to deliver current year balances and to meet full allocation for these licences in 2023/24 and 2024/2025. Balances in high security accounts also include any water traded from general security licences.
- (4) Evaporation loss from the three storages is based on forecast storage levels over the assessment period.
- (5) Essential requirements include basic rights, end of system flows, losses and any replenishment deliveries required. The loss budget (transmission and operational) is based on the best estimate of the volume required to run the river under dry conditions through to May 2025. This mostly consists of natural transmission losses as water soaks into riverbed sands. The loss allowance is updated regularly.
- (6) This may include held environmental water (HEW) as shown in the pie chart. The reporting of HEW is indicative only, prior to reconciliation of usage and net trade, and is estimated to be about 142.1 GL of GS, and 2.7 GL of HS. These reported entitlements are managed by agencies holding environmental water accounts. They include the NSW Department of Planning and Environment - Environment and Heritage and the Commonwealth Environmental Water Holder (CEWH).
- (7) All available water resources have been allocated, and there is a notional deficit. This is unlikely to materialise and will resolve with increased utilisation of tributaries to meet increased demand in the coming months. All commitments are considered deliverable, and the system is secure to May 2025 and beyond.

Resource Distribution as at 31 December 2022 Lachlan Regulated River Water Source



Allocations in 2022/23 for the Lachlan River regulated system

Date	License Category	Increment	Total 2022/23	Average Account Balance
1-Jul	Domestic & Stock	100%	100%*	100%*
1-Jul	Local Water Utility	100%	100%*	100%*
1-Jul	High Security	1.00 ML/unit share*	1.00 ML/unit share*	100%*
1-Jul	Conveyance	1.00 ML/unit share*	1.00 ML/unit share*	100%*
1-Jul	General Security	0.00 ML/unit share	0.00 ML/unit share	124%
28-Sep	Conveyance	1.00 ML/unit share*#	1.00 ML/unit share*#	100%*#
28-Sep	General Security	1.15 ML/unit share#	1.15 ML/unit share#	115%#

*Maximum allowable

#Following an account equalisation and reset on 28 September 2022 due to dam spill

Water allocation guide

The NSW Department of Planning and Environment – Water has produced a series of guides to describe the water allocation methods for most NSW regulated river systems. The guide for the Lachlan regulated river water source is available at:

www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

Further information

The next routine water allocation announcement for the Lachlan Regulated River Water Source will be issued on **Wednesday 8 February 2023**.

Information on available water determinations and water sharing plans is available on the department's website: www.industry.nsw.gov.au/water

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