

12 September 2023

Macquarie and Cudgegong Regulated Rivers Water Source

Water allocation update

This latest resource assessment finds no increase in allocation for general security entitlement holders and likewise no increase in the environmental water allowance (EWA).

The total Macquarie water source account balance for general security licenses is now 787 gigalitres (GL), or about 128% of entitlement on average. Similarly, the Cudgegong water source average account balance is now about 23.5 GL or 126% of entitlement on average.

This resource assessment is conservatively based on information to 31 August 2023. Any changes in resources since then will be captured in the next resources assessment.

Current allocation

12 September 2023	Allocation Increment	Average Account Balance
Macquarie GS	0%	128% (787 GL)
Cudgegong GS	0%	126% (23.5 GL)
Macquarie EWA	0%	104% (166 GL)
Cudgegong EWA	0%	213% (24 GL)

Dam levels (as of 12 September 2023)

- Burrendong Dam is 92.1% full – holding 1,099 GL.
- Windamere Dam is 97.5% full – holding 359 GL.

Key information

- Burrendong Dam received around 21 GL of inflows during August.
- August rainfall and inflows triggered the translucent environmental flow conditions in the water sharing plan. In the current water year, to the end of August 2023, translucent release has totalled around 27 GL.
- A minimum of 40GL of inflows will be required this month (September) before any allocation increment can be considered next month. This is subject to evaporation and delivery loss remaining within the budgeted volume.
- No bulk water transfers are expected to be required before June 2024.

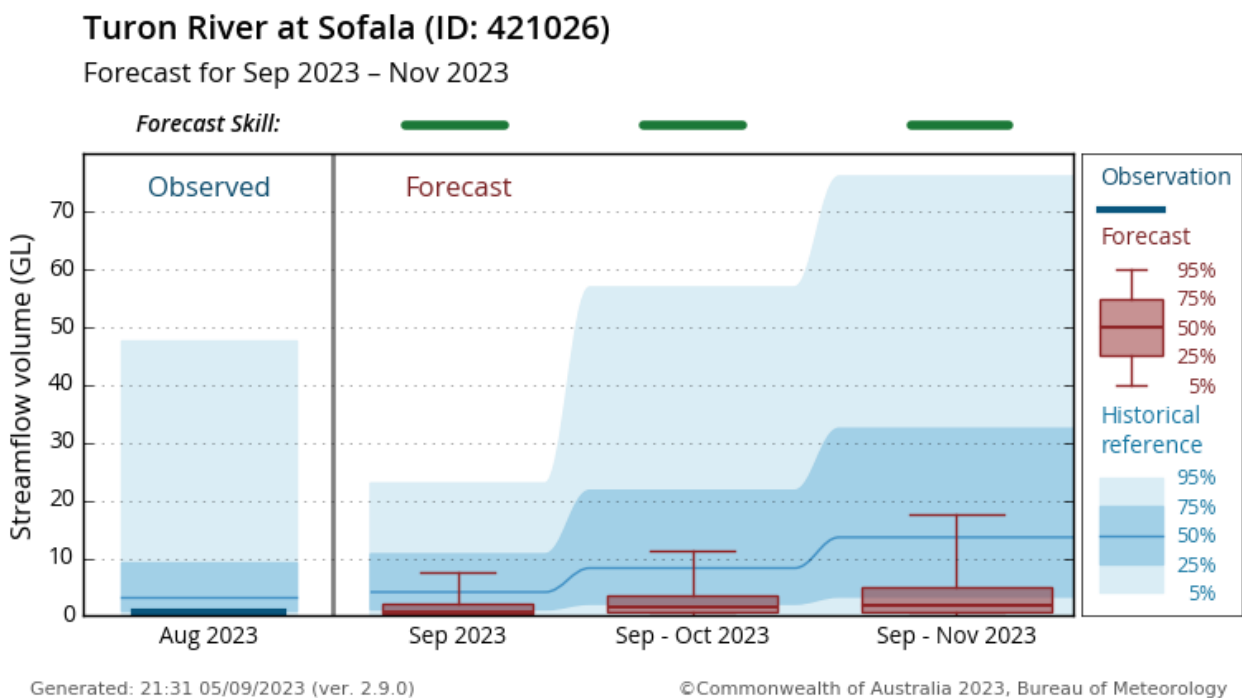
- Water users are reminded that quarterly evaporation reductions will apply to water allocations carried over into this water year, in accordance with Clauses 49, 71, and 79 of the water sharing plan. The next quarterly reduction is due around 30 September.
- A storage outlook plot for the assessment horizon is provided later in this statement.

Climate and streamflow outlooks

The Bureau of Meteorology’s seasonal outlook for October to December indicates that rainfall is likely to be below median across the catchment. Daytime and overnight temperatures are likely to be warmer than median over the next three months for the Macquarie catchment.

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

The Bureau of Meteorology issues a seasonal flow forecast for the Turon River at Sofala, which drains into Burrendong Dam (see the figure below). This provides an indication of potential storage inflows. All forecast quantiles of total flow volumes from September to November are clearly lower than the historical flows. This is indicating a likely dryer forecast inflow into Burrendong Dam. The graph to November 2023 is shown below and updates can be found at: www.bom.gov.au/water/ssf/?ref=ftr#id=421026



Resource distribution

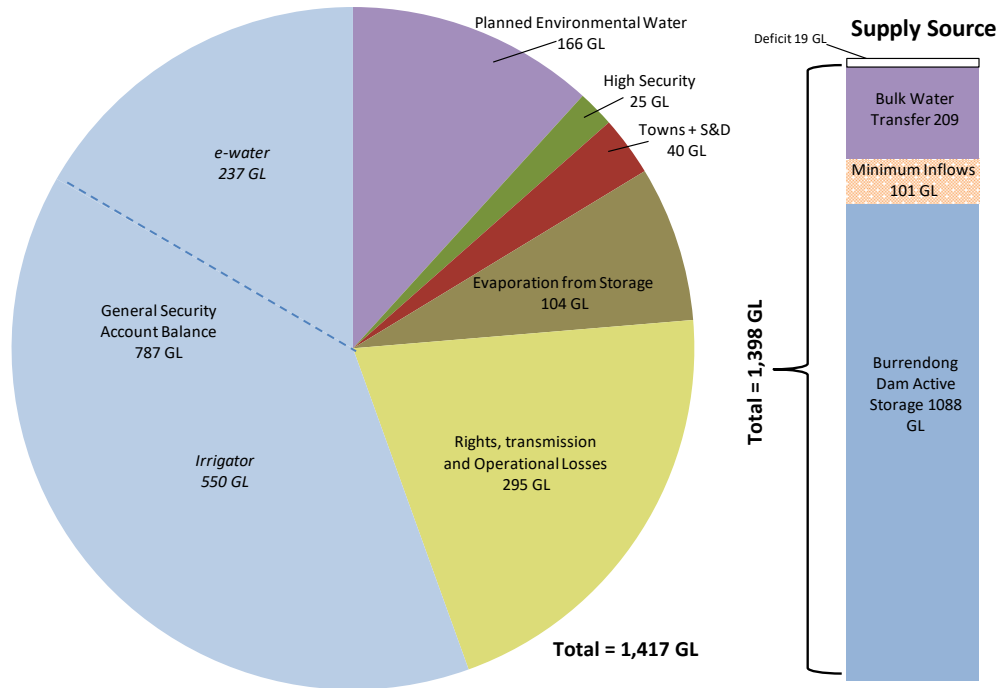
Macquarie and Cudgegong resource assessment data sheet

Resource Distribution (September 2023 to May 2025)	Volume (GL)
Current and Future Resources ⁽¹⁾	1,398
<i>less</i>	
This water year (07/2023 to 06/2024)	
Environmental Water Allowance	166
Domestic, Stock, Town balance	19
High Security balance	12
General Security balance ^{(2) (3)}	787
Evaporation from Burrendong ⁽⁴⁾	72
Rights, transmission, and operational losses ⁽⁵⁾	139
Storage reserve for 2024/25	
Domestic, Stock, Town, and High Security ⁽⁶⁾	34
Evaporation from Burrendong ⁽⁴⁾	32
Rights, transmission, and operational losses ⁽⁵⁾	156
<i>equals</i>	
Surplus (or deficit) ⁽⁷⁾	(19)

Notes:

- (1) Active Storage volume in Burrendong Dam at end of July (net of 34 GL of dead storage) plus minimum budgeted dam inflows from September 2023 to May 2025 plus the future planned 209 GL transfer available from Windamere Dam.
- (2) Volume in general security accounts below Burrendong Dam inclusive of balances of current year allocation and carryover amount.
- (3) This volume contains held environmental water (HEW). This is estimated to be 237 GL of GS, prior to reconciliation of usage and net trade. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Department of Planning and Environment – Environment and Heritage and the Commonwealth Environmental Water Holder (CEWH).
- (4) Evaporation loss from Burrendong is based on projected storage depletions.
- (5) The volume required to run the river to meet all non-licence-based demands and delivery overheads. This mostly comprises basic landholder rights, transmission and operational losses under dry conditions. The volume of second year is inclusive of delivery loss for the projected carry over volume.
- (6) Required volume to ensure full utilisation of 100% allocation to these licence holders.
- (7) Surplus (or deficit) of water available after accounting for all commitments. All available water resources have been fully allocated, and there is a small nominal deficit which may be recovered from underuse of allocated water over the horizon.

**Resource Distribution as at 31 August 2023
Macquarie and Cudgegong Regulated Rivers Water Source**



Allocations in 2023/24 for Macquarie and Cudgegong

Table 1: Water allocation history in 2023/24 for Macquarie (in % or ML/unit share)

Date	License Category	Increment	Total 2023/24	Average Account Balance
1-Jul	Domestic and 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	Supplementary	1.00 ML/unit share	1.00 ML/unit share*	100%*
12-Jul	General Security	0.5 ML/unit share	0.5 ML/unit share	131%
12-Jul	EWA- Macquarie	50%	50%	123%
10-Aug	General Security	0 ML/unit share	0.5 ML/unit share	132%
10-Aug	EWA- Macquarie	0%	50%	123%
12-Sep	General Security	0 ML/unit share	0.5 ML/unit share	128%
12-Sep	EWA- Macquarie	0%	50%	104%

Table 2: Water allocation history in 2023/24 for Cudgegong (in % or ML/unit share)

Date	License Category	Increment	Total 2023/24	Average Account Balance
1-Jul	Domestic and 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	Supplementary	1.00 ML/unit share	1.00 ML/unit share*	100%*
12-Jul	General Security	0.5 ML/unit share	0.5 ML/unit share	130%
12-Jul	EWA-Cudgegong	50%	50%	213%
10-Aug	General Security	0 ML/unit share	0.5 ML/unit share	129%
10-Aug	EWA-Cudgegong	0%	50%	213%
12-Sep	General Security	0 ML/unit share	0.5 ML/unit share	126%
12-Sep	EWA-Cudgegong	0%	50%	213%

*Maximum allowable.

Storage outlook

The storage outlook for the assessment horizon is provided below. It shows that with current allocations and commitments and an assumed repeat of historical minimum inflow sequence, together with forecast demands, the volume in Burrendong Dam will reduce to a minimum by the end of February and begin to recover in May 2025.

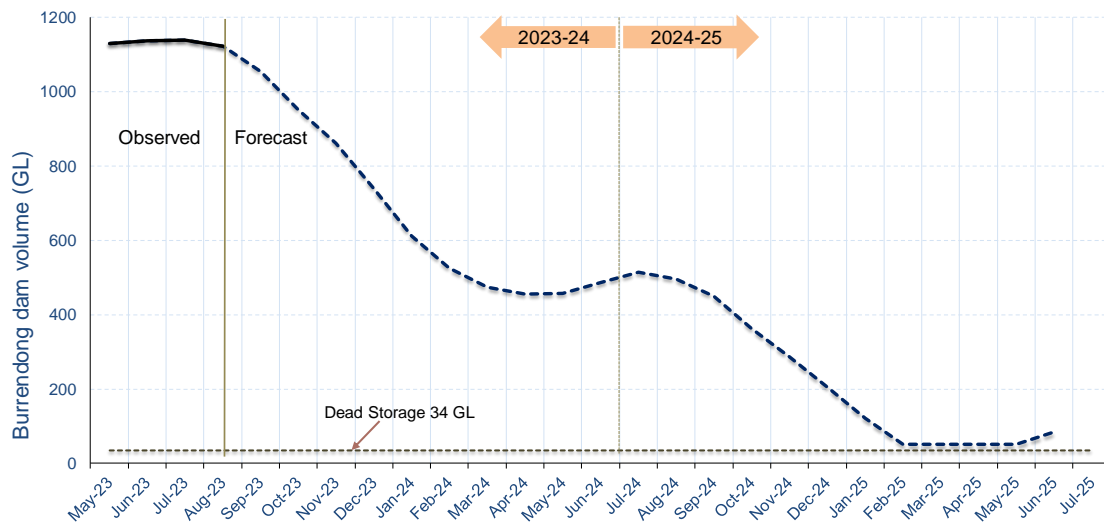


Figure 1: Simulated depletion of Burrendong Dam storage volume

Water allocation guide

The NSW Department of Planning and Environment - Water published a series of guides to describe the water allocation method for all major NSW regulated river systems. The guide for the Macquarie - Cudgegong regulated rivers water source is available at: water.dpie.nsw.gov.au/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

Further information

The next routine monthly water allocation statement for the Macquarie and Cudgegong Regulated Rivers Water Source will be issued on **Thursday 12 October 2023**.

Information on available water determinations and water sharing plans is available on the Department of Planning and Environment website: www.industry.nsw.gov.au/water

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