

11 April 2024

Macquarie and Cudgegong Regulated Rivers Water Source

Water allocation update

General security (GS) access licenses in the Macquarie and Cudgegong regulated rivers water source have received an allocation increase of 3% of entitlement. Both the Macquarie and the Cudgegong Environmental Water Allowance (EWA) have also increased by the same percentage in accordance with the water sharing plan. The small resource improvement comes from minor inflows plus lower than budget transmission and operational losses used in delivering water last month. This brings the total GS allocation this water year to 54% of entitlement.

The increment takes the GS account balance of those on the Macquarie River to 472 gigalitres (GL), or an average of 77% of entitlement. Similarly, the GS account balance for those on Cudgegong River is now about 19.6 GL or 105% of entitlement on average.

This resource assessment is conservatively based on information to 31 March 2024. Any changes in resources since then, including the rainfall/runoff from recent days, will be captured in the next routine statement in May 2024.

11 April 2024	Allocation Increment	Average Account Balance
Macquarie GS	3%	77% (472 GL)
Cudgegong GS	3%	105% (19.6 GL)
Macquarie EWA	3%	62% (100 GL)
Cudgegong EWA	3%	135% (15.3 GL)

Current allocation

Dam levels (as of 11 April 2024)

- Burrendong Dam is 58% full holding about 680 GL.
- Windamere Dam is 92% full holding about 340 GL.

Key information

- On April 1, 2024, carryover evaporation reduction was applied to carryover accounts of General Security (GS), High Security (HS) and EWA in the Macquarie and Cudgegong water sources in accordance with the water sharing plan rules. For more information <u>click here</u>.
- Burrendong dam received about 1 GL of inflow during March 2024. A storage outlook plot for the assessment horizon is provided later in this statement.



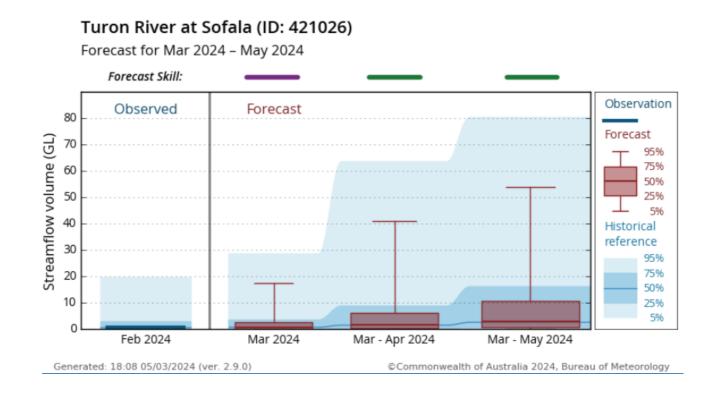
- A total of 103 GL of Macquarie EWA and a total of 9.2 GL of Cudgegong EWA water has been delivered to the end of March 2024.
- No bulk water transfers from Windemere Dam are forecast to be required before June 2024.

Climate and streamflow outlooks

The Bureau of Meteorology's seasonal outlook for April to June 2024 indicates that rainfall is likely to be below median to median across the catchment while day and overnight temperatures are likely to be above median over the next three months.

For further details: 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. The forecast median flow volumes from March to May 2024 are similar to historical medians meaning no significant wetting or drying trend is apparent. The graph from March to May 2024 is shown below, and updates can be found at: <u>http://www.bom.gov.au/water/ssf/?ref=ftr#id=421026</u>





Resource Distribution

Macquarie and Cudgegong Resource Assessment Data Sheet

Resource Distribution (April 2024 to April 2025)	Volume (GL)			
Current and Future Resources ⁽¹⁾	868			
less				
This water year (04/2024 to 06/2024)				
Environmental Water Allowance	100			
Domestic, Stock, Town balance	10			
High Security balance	5			
General Security balance ^{(2) (3)}	472			
Evaporation from Burrendong ⁽⁴⁾	10			
Rights, transmission, and operational losses ⁽⁵⁾	37			
Burrendong reserve for 2024/25				
Domestic, Stock, Town, and High Security ⁽⁶⁾	34			
Evaporation from Burrendong ⁽⁴⁾	40			
Rights, transmission, and operational losses ⁽⁵⁾	160			
equals				
Surplus (or deficit) ⁽⁷⁾				

Notes:

- (1) Active Storage volume in Burrendong Dam at end of March (net of 34 GL of dead storage) plus minimum budgeted dam inflows from April 2024 to April 2025 plus the future planned 205 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 165 GL of GS, prior to reconciliation of usage and net trade. These reported entitlements are managed by agencies holding environmental water accounts. They include the NSW DCCEEW - Biodiversity Conservation and Science Group (BCS) 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.



Macquarie and Cudgegong Regulated Rivers Water Source Planned Environmental Water / 100 GL **Supply Source** Domestic and Stock, Town, and High Security 49 GL Bulk Water Transfer 205 GL e-water 165 GL <u>Minimum</u> Inflows 13 GL Evaporation from Storage 50 GL General Security Account Balance Total = 868 GL 472 GL Burrendong Dam Active Storage 650 GL Rights, transmission Irrigator and operational losses 197 GL 307 GL Total = 868 GL

Resource Distribution as at 31 March 2024 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%
12-0ct	General Security	0 ML/unit share	0.5 ML/unit share	124%
12-0ct	EWA- Macquarie	0%	50%	85%
10-Nov	General Security	0 ML/unit share	0.5 ML/unit share	113%
10-Nov	EWA- Macquarie	0%	50%	70%

Macquarie and Cudgegong Regulated Rivers Water Source



Date	License Category	Increment	Total 2023/24	Average Account Balance
12-Dec	General Security	0 ML/unit share	0.5 ML/unit share	107%
12-Dec	EWA- Macquarie	0%	50%	60%
11-Jan	General Security	0 ML/unit share	0.5 ML/unit share	96%
11-Jan	EWA- Macquarie	0%	50%	59%
12-Feb	General Security	0 ML/unit share	0.5 ML/unit share	83%
12-Feb	EWA- Macquarie	0%	50%	59%
12-Mar	General Security	0.01 ML/unit share	0.51 ML/unit share	75%
12-Mar	EWA- Macquarie	1%	51%	60%
11-Apr	General Security	0.03 ML/unit share	0.54 ML/unit share	77%
11-Apr	EWA- Macquarie	3%	54%	62%

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%
12-0ct	General Security	0 ML/unit share	0.5 ML/unit share	114%
12-0ct	EWA-Cudgegong	0%	50%	213%
10-Nov	General Security	0 ML/unit share	0.5 ML/unit share	111%
10-Nov	EWA-Cudgegong	0%	50%	155%
12-Dec	General Security	0 ML/unit share	0.5 ML/unit share	110%
12-Dec	EWA-Cudgegong	0%	50%	143%
11-Jan	General Security	0 ML/unit share	0.5 ML/unit share	106%
11-Jan	EWA-Cudgegong	0%	50%	140%



Date	License Category	Increment	Total 2023/24	Average Account Balance
12-Feb	General Security	0 ML/unit share	0.5 ML/unit share	105%
12-Feb	EWA-Cudgegong	0%	50%	138%
12-Mar	General Security	0.01 ML/unit share	0.51 ML/unit share	103%
12-Mar	EWA-Cudgegong	1%	51%	132%
11-Apr	General Security	0.03 ML/unit share	0.54 ML/unit share	105%
11-Apr	EWA-Cudgegong	3%	54%	135%

*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 the historical minimum inflow sequence together with forecast demands, the volume in Burrendong Dam will reduce to a minimum by the end of April 2025 then begin to recover.

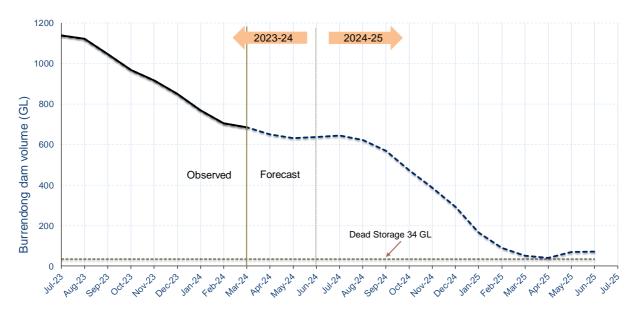


Figure: Simulated Depletion of Burrendong Dam Storage Volume

Water Allocation Guide

The NSW Department of Climate Change, Energy, the Environment and Water published a series of guides to describe the water allocation methods for most NSW regulated river systems. The guide for the Macquarie and Cudgegong Regulated Rivers Water Source is available at the link below.

For further details: <u>https://water.dpie.nsw.gov.au/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process</u>



Further information

The next routine monthly water allocation statement for the Macquarie and Cudgegong Regulated Rivers Water Source will be issued on **Friday 10th May 2024**.

Information on available water determinations and water sharing plans is available on the department's website: <u>Water (nsw.gov.au)</u>

Subscribe here to receive Department of Climate Change, Energy, the Environment and Water's monthly email update on water planning, management and reform in New South Wales.

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