

12 October 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 760 gigalitres (GL), or about 124% of entitlement on average. Similarly, the Cudgegong water source average account balance is now about 21 GL or 114% of entitlement on average.

This resource assessment is conservatively based on information to 30 September 2023. Any changes in resources since then will be captured in the next resources assessment.

## Current allocation

| 12 October 2023 | Allocation Increment | Average Account Balance |
|-----------------|----------------------|-------------------------|
| Macquarie GS    | 0%                   | 124% (760 GL)           |
| Cudgegong GS    | 0%                   | 114% (21 GL)            |
| Macquarie EWA   | 0%                   | 85% (135 GL)            |
| Cudgegong EWA   | 0%                   | 213% (24 GL)            |

## Dam levels (as of 11 October 2023)

- Burrendong Dam is 85% full – holding 1,015 GL.
- Windamere Dam is 97% full – holding 357 GL.

## Key information

- A minimum of 40GL of inflows will be required this month (October) before any allocation increment can be considered next month. This is subject to evaporation and delivery loss remaining within the budgeted volume.
- Water users are advised that a quarterly evaporation reduction of 0.6% has been applied to carryover water in accounts downstream of Burrendong Dam, in accordance with the water sharing plan. The additional evaporation from Windamere Dam caused by carryover water was insignificant, resulting in no account reductions.
- The next quarterly evaporation reduction is due to be applied on 1 January 2024.

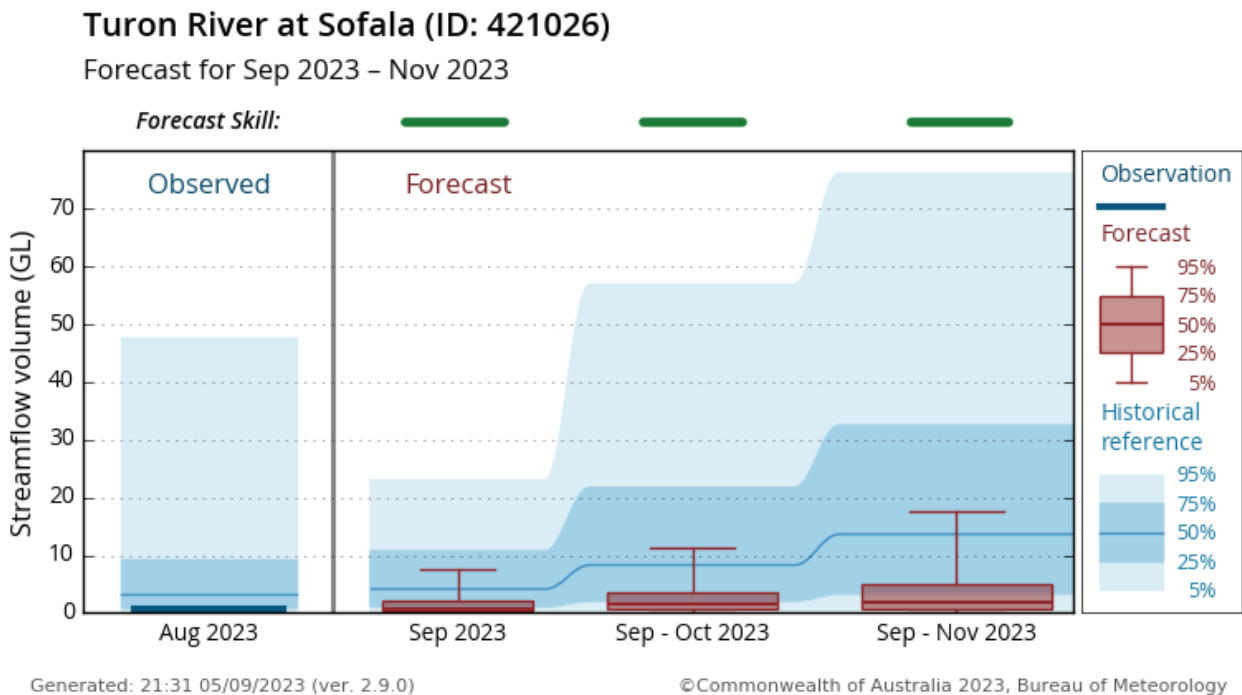
- Burrendong dam received around 14 GL of inflows during September 2023. Translucent release continued in first week of September. So far this water year about 31.5 GL of translucent water has been delivered.
- No bulk water transfers are expected to be required before June 2024.
- A storage outlook plot for the assessment horizon is provided later in this statement.

## Climate and streamflow outlooks

The Bureau of Meteorology’s seasonal outlook for November to January 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](http://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 very likely dryer 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](http://www.bom.gov.au/water/ssf/?ref=ftr#id=421026)



## Resource distribution

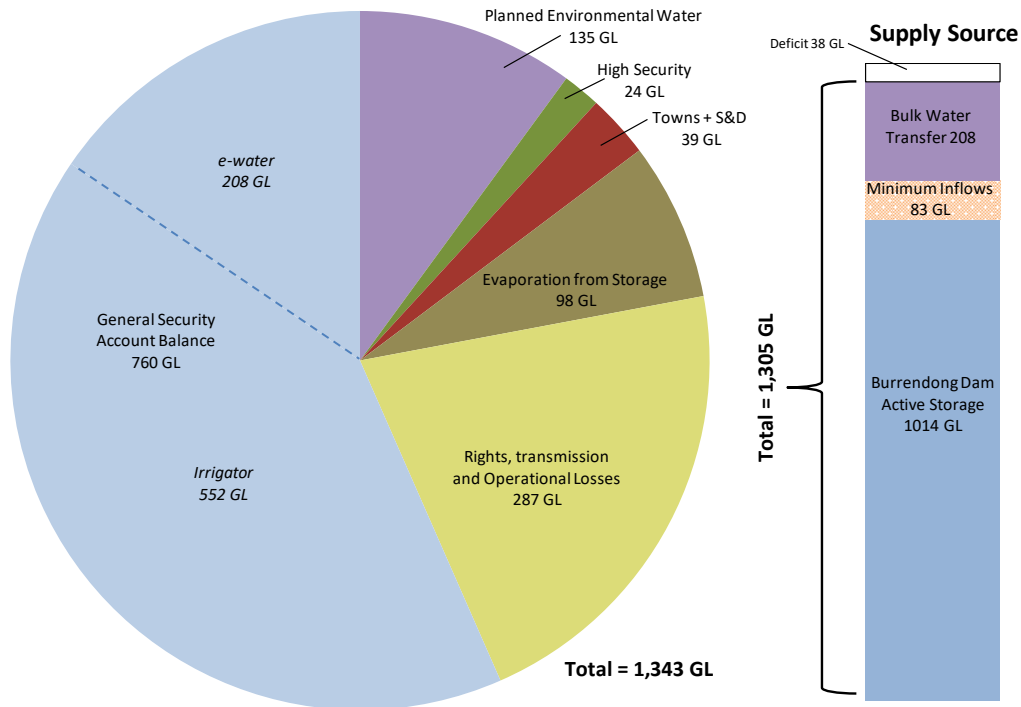
### Macquarie and Cudgegong Resource Assessment Data Sheet

| Resource Distribution (October 2023 to May 2025)            | Volume<br>(GL) |
|---|----------------|
| Current and Future Resources <sup>(1)</sup>                 | 1,305          |
| <i>less</i>   |                |
| This water year (10/2023 to 06/2024)                        |                |
| Environmental Water Allowance                               | 135            |
| Domestic, Stock, Town balance                               | 18             |
| High Security balance                                       | 11             |
| General Security balance <sup>(2) (3)</sup>                 | 760            |
| Evaporation from Burrendong <sup>(4)</sup>                  | 66             |
| Rights, transmission, and operational losses <sup>(5)</sup> | 131            |
| Storage reserve for 2024/25                                 |                |
| Domestic, Stock, Town, and High Security <sup>(6)</sup>     | 34             |
| Evaporation from Burrendong <sup>(4)</sup>                  | 32             |
| Rights, transmission, and operational losses <sup>(5)</sup> | 156            |
| <i>equals</i>   |                |
| Surplus (or deficit) <sup>(7)</sup>                         | (38)           |

#### Notes:

- (1) Active Storage volume in Burrendong Dam at end of September (net of 34 GL of dead storage) plus minimum budgeted dam inflows from October 2023 to May 2025 plus the future planned 208 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 208 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. There is a small deficit which will be monitored closely.

**Resource Distribution as at 30 September 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%                    |
| 12-Oct | General Security    | 0 ML/unit share    | 0.5 ML/unit share   | 124%                    |
| 12-Oct | EWA- Macquarie      | 0%                 | 50%                 | 85%                     |

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-Oct | General Security    | 0 ML/unit share    | 0.5 ML/unit share   | 114%                    |
| 12-Oct | 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 2025 and begin to recover in after 3 months.

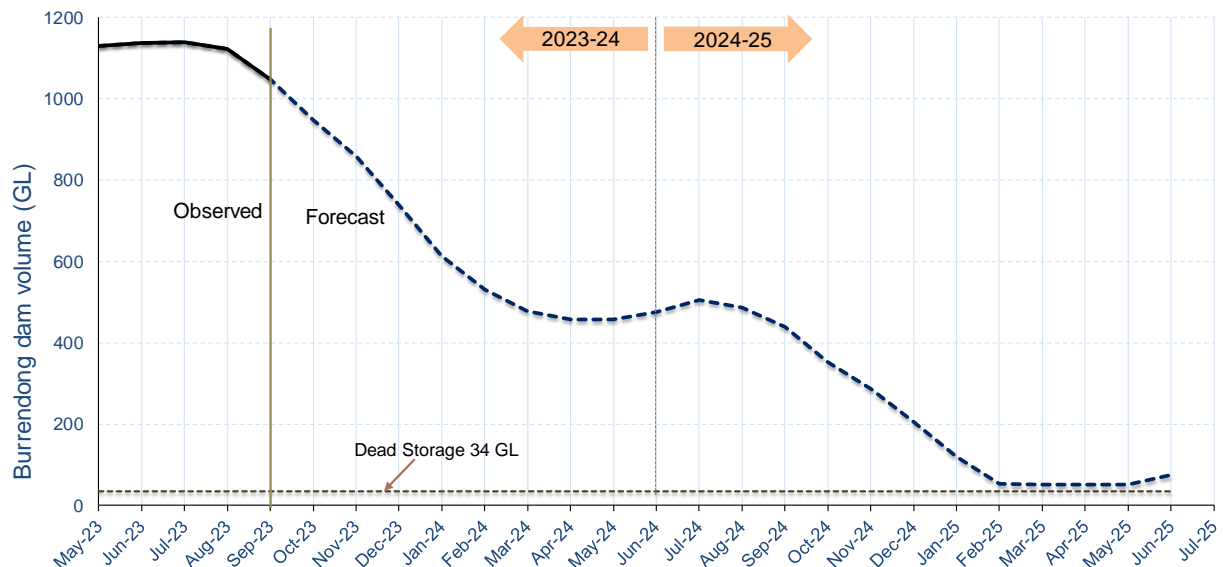


Figure: Simulated depletion of Burrendong Dam storage volume

## 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](http://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 **Friday 10 November 2023**.

Information on available water determinations and water sharing plans is available on the Department of Planning and Environment website: [water.dpie.nsw.gov.au](http://water.dpie.nsw.gov.au)

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