

10 August 2022

# Macquarie and Cudgegong Regulated Rivers Water Source

## Water allocation update

There is a 60% increase in allocation for general security entitlements in the Macquarie and Cudgegong catchments. This brings the total general security cumulative allocation for both catchments to 100% (the maximum limit) for the current water year. The environmental water allowance has received a commensurate increase in allocation. All higher priority licences were allocated their maximum 100% of entitlement on 1 July 2022.

Carryover from the 2021/22 water year was finalised at the end of July. In the Macquarie, the final average general security carryover was approximately 536 gigalitres (GL), or 87% of entitlement and 46 GL, or 243% of entitlement in the Cudgegong.

2022/23	General Security	Average Account Balance
Macquarie	100%	134%
Cudgegong	100%	343%

Rainfall in July was above average across the catchment, with wet catchment conditions aiding runoff generation. Burrendong Dam is above 100% full and under FMZ operations.

All allocations have reached their annual maximum limits. The current planning outlook runs through to May 2024 and aims to ensure that high priority needs can be assured.

Transfers from Windamere Dam to Burrendong Dam are currently not forecast to be required until at least September 2023.

## Burrendong Dam spill forfeiture

The allocation increase of 60% this month is mainly driven by forfeiture of carryover with Burrendong Dam releasing water from the flood mitigation zone (FMZ) throughout July. Approximately 448 GL of inflow was received into Burrendong Dam during July. This inflow volume has been proportionately withdrawn from the carryover balances of high security and general security entitlements and the environmental water allowance, as required by the water sharing plan.

Burrendong Dam is likely to remain in the FMZ well into the 2022/23 water year and water users are advised to note the following:

- Carryover spill reduction will continue to occur in the 2022/23 water year to water carried over from the 2021/22 water year.

- The volume of inflow into Burrendong Dam during August 2022, while the storage is in the FMZ, will be removed from carryover balances in the Macquarie and will be reported in the routine September water allocation statement. This process will repeat at the end of each month while water remains in the FMZ until all carryover has been withdrawn from accounts.
- When all carryover has been withdrawn, general security and high security accounts in the Macquarie and Cudgegong will be reset to 100% of entitlement at the end of the relevant month.
- Following the first reset in 2022/23, if Burrendong storage level falls below 100% and then subsequently re-enters the FMZ again during this water year, a further reset of allocations to 100% of entitlement will be made.
- Carryover balances in the Cudgegong River general security accounts will not be forfeited until Windamere Dam spills. However, any water assigned from the carryover sub-account of a Macquarie access licence to a Cudgegong access licence will be treated as if it were in a carryover sub-account of a Macquarie access licence. Any remaining balances from that trade will incur the same spill reduction that is applied for the Macquarie River licences during the water year.
- Any water forfeited from carryover balances in future months cannot be reallocated back to general security or the EWA as general security allocations have reached their maximum limit of 100% for the water year.
- Now that all water has been fully allocated for 2022/23, regular monthly water allocation statements will cease. However, statements will be issued at least quarterly to update water users on resource conditions and will also be issued in conjunction with the completion of carryover withdrawal and any account reset operations.

## Flood Mitigation Zone (FMZ) operations

Rainfall in early August has resulted in significant inflow into the dam and tributaries. Releases from Burrendong Dam will be increased to create airspace over the coming weeks. The current strategy is aiming to draw down the storage to create airspace in the event of any further rainfall with the potential for further high rainfall throughout the remainder of August. These releases are creating varying levels of flooding at different points along the Macquarie River downstream of Burrendong Dam.

Water users are advised to refer to the Bureau of Meteorology for flood warnings and to check the water insights portal for any updates on airspace operations:

[waterinsights.watarnsw.com.au/11984-macquarie-and-cudgegong-regulated/updates](https://waterinsights.watarnsw.com.au/11984-macquarie-and-cudgegong-regulated/updates)

[www.bom.gov.au/nsw/warnings/](https://www.bom.gov.au/nsw/warnings/)

## Dam levels (as of 10 August 2022)

- Burrendong Dam is 128% full – holding about 1,512,000 megalitres (ML)
- Windamere Dam is 78% full – holding about 287,000 ML.

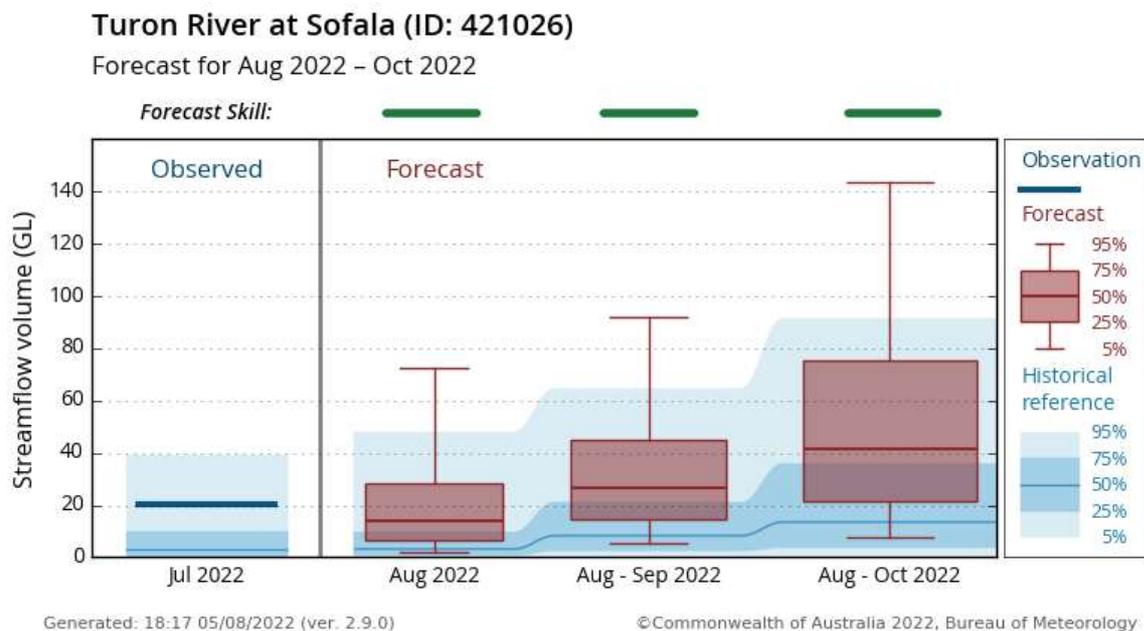
## Climate and streamflow outlooks

The Bureau of Meteorology’s seasonal outlook for August to October indicates that rainfall is very likely to be above average across the catchment. Daytime temperatures are likely to be cooler than average and overnight temperatures are likely to be warmer than average.

Further details at: [www.bom.gov.au/climate/outlooks/#/overview/summary](http://www.bom.gov.au/climate/outlooks/#/overview/summary)

The Bureau of Meteorology also issues a seasonal flow forecast for the Turon River at Sofala that drains into Burrendong Dam (see the figure below). This provides a forecast of potential storage inflows. All five forecast flow references are higher than the historical references for August to October, indicating that higher than historical inflows are likely over these months.

Further details at: [www.bom.gov.au/water/ssf/#id=421026](http://www.bom.gov.au/water/ssf/#id=421026)



## Resource distribution

<b>Macquarie Resource Distribution (August 2022 to May 2024)</b>	Volume (GL)
Current and Future Resources <sup>(1)</sup>	1,725
<i>less</i>	
General Security account balance <sup>(2), (7)</sup>	823
Planned Environmental Water <sup>(3)</sup>	213
Domestic, Stock, Town <sup>(4)</sup>	43
Inaccessible Storage <sup>(6)</sup>	34
High Security <sup>(4)</sup>	25
Essential Requirements and Losses <sup>(5)</sup>	300
Evaporation from Storage	104
Airspace releases from FMZ <sup>(8)</sup>	134
<i>equals</i>	
Surplus (or deficit) <sup>(9)</sup>	49

### Notes:

- (1) Estimated storage volume in Burrendong Dam as at the end of July plus minimum budgeted dam inflows from August 2022 to May 2024 plus the future planned 154 GL transfer from Windamere Dam.
- (2) Volume in general security accounts including carryover and AWDs for this water year, discounted for evaporative losses.
- (3) Water allocated to the Environmental Water Allowance (EWA) under the water sharing plan to provide for the Macquarie Marshes and the riverine environment. Excludes 'licence-based' environmental water.
- (4) Reserves required to meet the full use of allocated water by Domestic, Stock, Town and High Security WALs below Burrendong Dam over the assessment horizon.
- (5) Replenishments, basic rights and system overheads to run the river under dry conditions over the 22 months from 1 August 2022. System overhead includes transmission losses and operational loss. This estimate is regularly refined as the year unfolds.
- (6) Dead storage of 34 GL to ensure valve operations at very low storage levels and provide a buffer for additional usage.
- (7) This volume may contain held environmental water (HEW). The reporting of HEW is indicative only, prior to reconciliation of usage and net trade, and is estimated to be 236 GL of GS. 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).
- (8) This represents the release required to meet objectives of FMZ operations.
- (9) This value indicates balance remaining after all allocations (negative = deficit). There is a surplus of 49 GL. The system is secure to May 2024 and beyond.

**Resource Distribution: 31 July 2022**

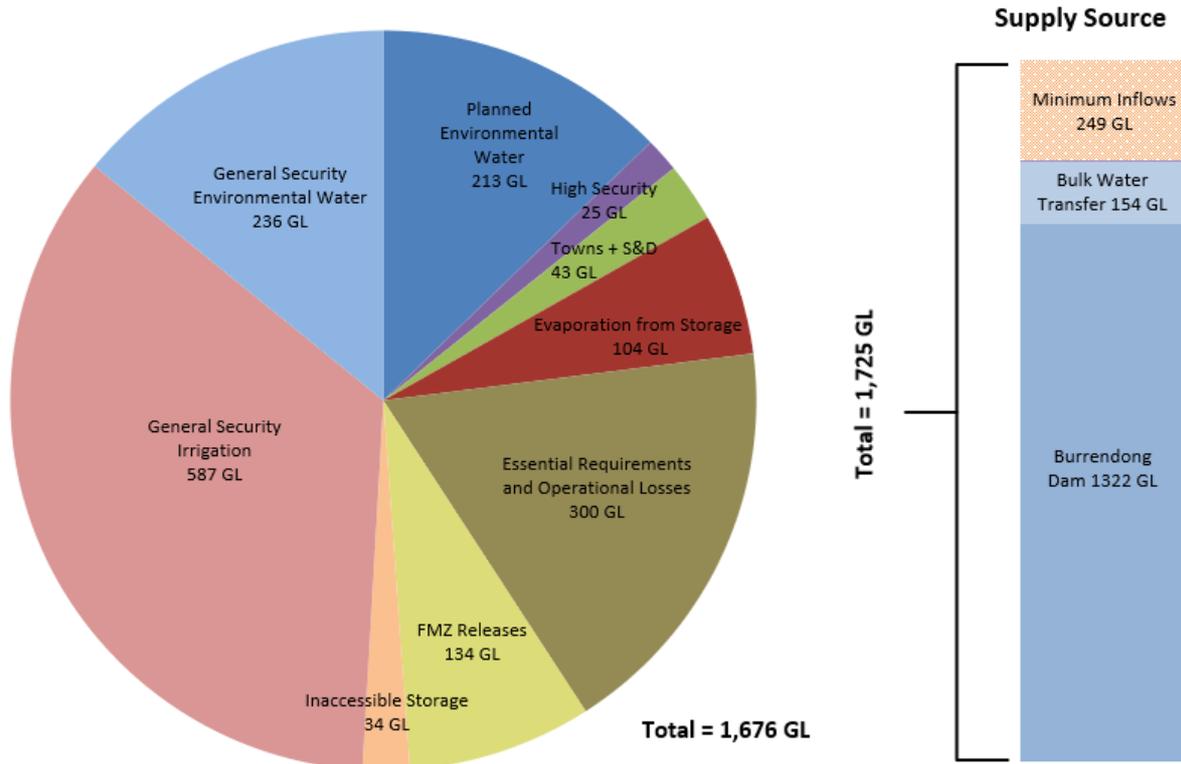


Table 1 : Water allocation history for Macquarie 2022/23 (in % or ML/unit share)

Date	License Category	Increment	Total 2022/23	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%*
1-Jul	General Security	0.40 ML/unit share	0.40 ML/unit share	127%#
10-Aug	General Security	0.60 ML/unit share	1.00 ML/unit share*	134%

\*Maximum allowable

#Updated to reflect final carryover from 2021/22 water year

Table 2: Water allocation history for Cudgong 2022/23 (in % or ML/unit share)

Date	License Category	Increment	Total 2022/23	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%*
1-Jul	General Security	0.40 ML/unit share	0.40 ML/unit share	283%#
10-Aug	General Security	0.60 ML/unit share	1.00 ML/unit share*	343%

\*Maximum allowable

#Updated to reflect final carryover from 2021/22 water year

## 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 Macquarie and Cudgong regulated rivers water source is available at the link below: [www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process](http://www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process)

## Further information

As water has now been fully allocated, routine monthly water allocation statements for the Macquarie and Cudgong Regulated Rivers Water Source will cease for 2022/23.

However, statements will be issued at least quarterly to keep water users informed of resources conditions. They will also be issued in conjunction with the completion of carryover withdrawal and any reset of accounts.

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

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