

15 August 2023

# Murrumbidgee Regulated River Water Source

## Water allocation update

This resource assessment has produced a 2% increase to general security allocations in the Murrumbidgee regulated river water source.

The current general security allocation for 2023/24 is now 39% of entitlement. Together with the total volume carried forward, current average water availability across all general security licences is around 67% of entitlement.

Storages have been full and spilling, and with negligible demand it means there has been little opportunity to capture and allocate new water. However, as forecast drier conditions eventuate and demand for water increases, drawing down storages, the potential for increased allocations rises.

It is expected that the system will slowly transition to regulated conditions as rainfall tends towards drier conditions and water demand increases. However, pulses of high inflows into Blowering from electricity generation by Snowy Hydro may still trigger small periods of airspace operations in the coming weeks, prior to demand ramping up and significantly drawing down Blowering storage.

The small net resource improvement underpinning today's allocation increase is comprised of a reduced liability on the valley due to the spill of the Murrumbidgee Intervalley Trade (IVT) balance, unregulated flows covering loss and end of system flow requirements and a small increase in the expected releases Snowy Hydro will make later this water year above its Required Annual Release (RAR) requirements. The resource improvements are offset by a large volume of Snowy RAR having been released onto full a storage that was unable to be captured or used.

Some reaches of the Murrumbidgee system remain unregulated, meaning supplementary access is available in some areas. Subject to their licence conditions and approved periods of access, individual water users can take supplementary water and use uncontrolled flow provisions. Supplementary access details can be found at: [waterinsights.waternsw.com.au](http://waterinsights.waternsw.com.au)

Information on the **spill of Murrumbidgee Intervalley Trade (IVT)** and **an extension of the temporary restriction to interstate trade** is provided below in this statement.

## Year to date allocations for 2023/24

2023/24	High Security	General Security	Average Carryover
Murrumbidgee	95%	39%	28%

## Storage levels (as of 15 August 2023)

- Blowering Dam is about 92% full – stable – holding about 1,500,000 megalitres (ML).
- Burrinjuck Dam is about 97% full – stable – holding about 990,000 ML.

## Climatic outlook

The Bureau of Meteorology (BoM) seasonal outlook for September to November shows that rainfall will very likely be below median. Temperatures are expected to be hotter than median.

The Bureau's El Niño-Southern Oscillation (ENSO) index outlook indicator is on El Niño Alert (issued 1 August 2023). This is to be updated by BoM later today. Models have indicated that El Niño conditions may develop in the coming weeks. Also, positive Indian Ocean Dipole (IOD) conditions may develop in the coming weeks. Should El Niño or positive IOD conditions develop, rainfall will likely be drier than median.

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

## Trade

Trade **out of the Murrumbidgee is open** and trade **into the Murrumbidgee is closed** (as of 15 August 2023). Water users should monitor the WaterNSW website ([www.waternsw.com.au](http://www.waternsw.com.au)) for daily information about the IVT account balance, the status of trade, and other information including seasonal trade closures. The Murrumbidgee IVT account is operated between its normal 0 gigitalitres (GL) and 100 GL range. The Murrumbidgee IVT balance can fluctuate rapidly, and information presented in this statement is current at the time of writing.

## IVT in 2023/24

When water physically spills from Murrumbidgee storages (including pre-releases for airspace operations), a decision must be made to spill or retain any IVT balance. With NSW Murray allocations full and Murrumbidgee allocations substantially lower, a decision to spill the IVT balance was made. The **spill took effect on 14 August 2023**. The volume of the spill was around 18 GL. This is reflected in the reduction of the IVT carryover volume in the data sheet below (from 89 GL previously to 71 GL currently). The spill volume was re-assigned to underpin part of the general security allocation increase announced in this statement.

Water users should monitor the WaterNSW website ([www.waternsw.com.au](http://www.waternsw.com.au)) for detailed information on trade.

## Interstate Trade

A **temporary restriction on interstate water trades** (clause 71V of the *Water Management Act 2000*) into the NSW Murray, Lower Darling and Murrumbidgee regulated river water sources from other states is **currently in place, until 31 August 2023**.

The restriction is based on the risk of spill from headwater storages, which has not significantly reduced and is now forecast to remain high well into September. **Therefore, the current temporary interstate trade restriction will need to be extended to the end of September 2023.**

Interstate trades are typically accompanied by a reassignment of physical water (resource) from the selling state to the buying state. When storages are full or near full, there is limited capacity to hold

reassigned resource and a high risk that any resource which is reassigned will spill. Currently, interstate trades into NSW cannot be safely underpinned by resource. Accepting incoming interstate trades in such conditions puts NSW Murray allocations and water users at risk.

More information on temporary water restrictions can be found at:

[www.industry.nsw.gov.au/water/allocations-availability/temporary-water-restrictions](http://www.industry.nsw.gov.au/water/allocations-availability/temporary-water-restrictions)

## Uncontrolled Flow (without-debit-take)

The water sharing plan permits general security water users to take water from uncontrolled flows (also known as unregulated flows) without debit from their account water. This is permitted during periods of announced supplementary access.

Supplementary access details can be found at: [waterinsights.waternsw.com.au](http://waterinsights.waternsw.com.au)

Without-debit-take from uncontrolled flows by individual general security entitlement holders is subject to the following rules as outlined in the water sharing plan:

- Without-debit-take from uncontrolled flows (i.e. during periods of unregulated flows when supplementary access is permitted) is allowed when the effective available water for the current water year is less than or equal to 70% of entitlement (i.e. 0.7 megalitres per unit share component). Exercising of without-debit-take provisions is subject to the licence conditions of the respective individual entitlement/licence.
- The effective available water for an individual general security entitlement is defined as;
  - just the general security allocation for the current water year if the carryover is less than 15% of entitlement for the relevant licence, or
  - the general security allocation for the current water year, **plus** the carryover less 15% of entitlement, when carryover is greater than 15% of entitlement for the relevant licence.
- The effective available water in the current water year, **plus** without-debit-take from uncontrolled flows, cannot exceed 85% of an individual entitlement's share components (i.e. 0.85 megalitre per unit share component). Should these respective values sum to greater than 85% (for example, due to allocations increasing), then without-debit-take volumes will be converted to debit-take, to the extent necessary to bring the sum down to 85% of entitlement. That is, the account will reflect the new allocation as already having been used.
- When the effective available water in the current water year is greater than or equal to 85% of entitlement (i.e. 0.85 megalitre per unit share) for an individual entitlement, all without-debit-take will have converted to debit-take.

Water users should refer to their licence conditions for individual application of these rules.

## Next announcement

The next water allocation statement will be published on **Friday 1 September 2023**. It will be a short statement updating the water availability in the valley.

**Note: Murrumbidgee statements are available from around 2:30pm on the day of the publication.**

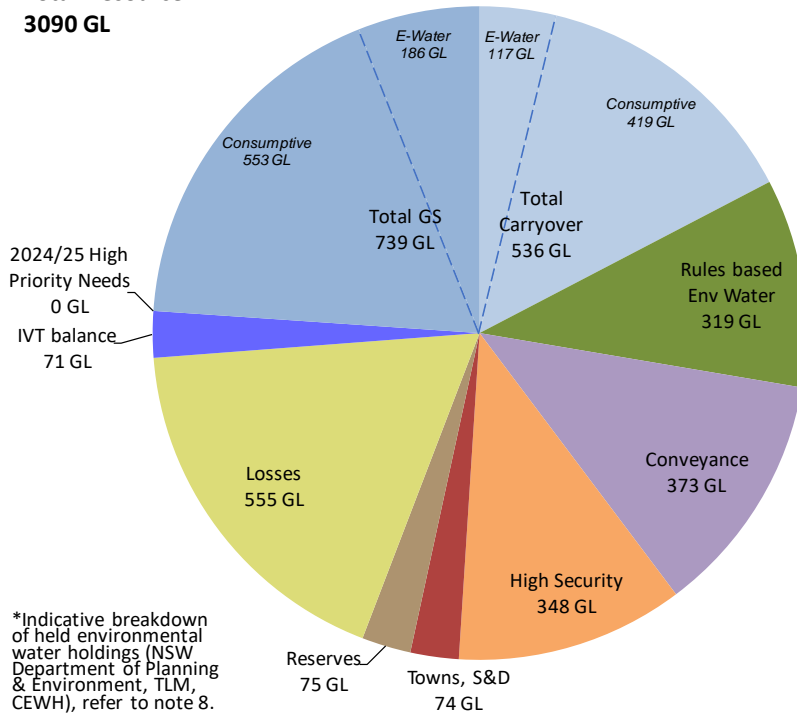
## Murrumbidgee resource assessment data sheet

Resource Distribution* (15 August) for 2023-24	Volume (GL)
Total Available Resource <sup>(1)</sup>	3,090
<b>less</b>	
Carryover <sup>(8)</sup>	536
Rules based Environmental Water <sup>(2)</sup>	319
Towns, Stock, Domestic (100%)	74
Reserves <sup>(3)</sup>	75
Conveyance <sup>(4)</sup>	373
Announced High Security (95%)	348
Losses (transmission, evaporation, operational) <sup>(5)</sup>	555
Murrumbidgee IVT account (carryover remaining from 1 July) <sup>(6)</sup>	71
Announced General Security (39%) <sup>(8)</sup>	739
Year 2 (2024-25) high priority needs <sup>(7)</sup>	0

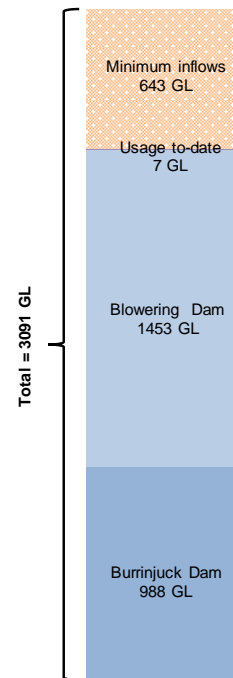
\*See notes below

## Murrumbidgee resource distribution 2023-24 – 15 August 2023

### Total Resource 3090 GL



### Supply Distribution<sup>(9)</sup>



\*See notes below

### Data sheet notes

- 1) Total available resource – total active storage volume (Blowering & Burrinjuck Dams) at the day of assessment plus any usable flows in transit plus minimum inflows for rest of the year plus Snowy Hydro’s assured Required Annual Release (RAR) (including any flex (pre-release) from the prior year), as well as estimated usage to date. Snowy Hydro’s net Jounama Release for this year (2023-24) is estimated to be about 460 GL (includes montane release).
- 2) Rules-based environmental water – water required to be set aside under water sharing plans to provide for riverine environments. Includes end-of-system flow requirements (currently 175 GL) and environmental water allowances (EWA1 = 100 GL, EWA2 = 44 GL, EWA3 = 0 GL). Excludes ‘licence-based’ environmental water also known as held environmental water (HEW). This total volume typically reduces as water is used during the year.
- 3) Reserves – required primarily under statutory plans, and mainly used for emergency purposes and critical needs. Includes 25 GL per dam as an operational reserve, and Provisional Storage Volumes (PSV1 = 25 GL, PSV2 = nil).
- 4) Conveyance entitlement – a category of access licence originally issued to Irrigation Corporations to facilitate delivery of water through their channel systems. Allocation to this category is prescribed in the water sharing plans and is a function of high and general security allocations. Conveyance licences in the Murrumbidgee valley can also carryover 30% of their entitlement.
- 5) Losses – the best estimate of the volume required to run the river under dry conditions to meet demands for the remainder of the water year. This includes storage evaporation, transmission losses and operational loss. This estimate is updated monthly.
- 6) IVT account carryover value into 2023-24. Does not necessarily reflect the current IVT balance. Balance was reduced by 18 GL (equating to the IVT spill which occurred on 14 August 2023) from 89 GL to 71 GL.
- 7) 2024-2025 high priority needs on 1 July - volume set aside to cover high priority needs on 1 July 2024, for ‘Year 2’, including estimated carryover.
- 8) Held environmental water (HEW) – licenced water administered by environmental water holders is reported here, with the associated portions of general security allocation and carryover also identified in the above pie chart. This reporting of held environmental water is the total credited to accounts (not usage) and is estimated to be 186 GL of GS, 11 GL of HS, 76 GL of conveyance allocation and 117 GL of GS carryover. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Department of Planning and Environment, TLM and CEWH. Details on environmental holdings can be found on individual agency websites.
- 9) Supply Distribution – the distribution of supply includes volumes at the time of the assessment for the following categories: active volumes in the dams, indicative usage to-date (may be estimates prior to reconciliation with hydrographic updates) and assumed minimum future inflows (includes Snowy Hydro’s guaranteed inflows for the water year, and late season inflows).

## Chances of improvement

The chances of improved Murrumbidgee general security allocations based on a repeat of historical inflows, are provided in the table below under a variety of conditions. The forecast is based on all available historical data, which gives a better outlook than using just the driest years on record (dry tercile).

It is important to note that these estimates are indicative improvements only and are not guaranteed allocations. Estimates are likely to change based on weather conditions, water user behaviour, water management decisions and other events. This means water users should use this information with caution and at their own risk, particularly as it projects many months ahead.

## Forecast general security allocations (%)

(Any carryover water can be added to these indicative allocations)

Repeat of historical inflow conditions	1 Oct 2023	1 Feb 2024
99 chances in 100 (extreme dry) (99%)	39%	39%
9 chances in 10 (very dry) (90%)	40%	40%
3 chances in 4 (dry) (75%)	44%*	44%*
1 chance in 2 (median) (50%)	48%*	62%*
1 chance in 4 (wet) (25%)	48%*	100%*

Note 1: Estimated values indicative only, not guaranteed and subject to change based on actual events unfolding.

Note 2: Forecast assumes 28% carryover on average.

\* Model indicates potential storage spills, limited capacity for resource improvement and constrained delivery from Blowering. High uncertainty exists and further allocation improvements in median and wet scenarios may be driven by water usage rather than inflows. Should demand not set in early in the 2023/24 water year, general security allocation improvements over the 75% inflow case will be very limited, and potentially lower than those shown in the table above.

## 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 Murrumbidgee regulated system is available at: [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)

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