Department of Planning and Environment

Water availability and allocation outlook



15 August 2022

Murrumbidgee Regulated River Water Source

Water allocation update

There is a 3% increase to general security allocation in the Murrumbidgee regulated river water source. The cumulative general security allocation for the 2022/23 water year is now at 41%. With average carryover of approximately 28%, total general security water availability for the 2022/23 water year is about 69% of entitlement.

The ongoing wet conditions are further prolonging supplementary access periods. Subject to their licence conditions and approved periods of access, water users can take supplementary water and use uncontrolled flow provisions. Supplementary access details can be found at: waterinsights.waternsw.com.au

With storages effectively full, there is no airspace to capture new resource. The incremental improvement in allocation is derived from unregulated and receding flows meeting loss and end of system flow requirements, freeing up some resource to be reassignment to allocations. Significant resource improvements, and therefore allocation increases, are generated from regulated usage creating airspace in storages followed by inflows backfilling this airspace. The timing of significant improvements is therefore dependent on a drying period and increased water user demand.

Information on the **Murrumbidgee Intervalley Trade (IVT) balance spill** (scheduled for 31 August 2022) and a **temporary restriction to interstate trade** is provided below in this statement.

2022/23	High Security	General Security	Average Carryover
Murrumbidgee	95%	41%	28%

Storage levels (as at 15 August 2022)

- Blowering Dam is about 97% full stable holding about 1,590,000 megalitres (ML).
- Burrinjuck Dam is about 95% full falling holding about 970,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for September to November indicates that rainfall is likely to be above average across the catchment. Day time temperatures are likely to be below average for majority of the catchment, while overnight temperatures are likely to be above average.

The Bureau's El Niño-Southern Oscillation (ENSO) outlook is on La Niña WATCH, meaning there is an elevated chance of it developing later in the year. The Indian Ocean Dipole (IOD) index is currently exceeding the negative IOD threshold, with models indicating that negative IOD conditions may continue into summer. A negative IOD increases the chances of above average winter–spring rainfall for much of Australia.



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

Trade

Trade **out** of the Murrumbidgee is **closed**, while trade **into** the Murrumbidgee Valley is **open** (as of 15 August 2022). Water users should monitor the WaterNSW website (www.waternsw.com.au) for daily information about the IVT account balance, the status of trade, and other information. The IVT account balance at the end of the previous water year was carried forward into this water year. The normal operating range for the Murrumbidgee IVT account is between 0 GL and 100 GL.

IVT in 2022/23

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 faring better than Murrumbidgee allocations, a decision to spill the IVT balance was made in July 2022, with the **spill to take effect on 31 August 2022.** The removal of water from the IVT account will open trade opportunity to the Murray on the morning of 31 August 2022. Water users should monitor the WaterNSW website (www.waternsw.com.au) for detailed information on trade.

Spilling of the IVT account will likely result in an allocation boost of up to 5% to Murrumbidgee general security entitlement holders. The allocation improvement will be determined in the resource assessment and incorporated into the allocation statement after the spilling of the IVT account.

Interstate 71V restriction

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 was announced on 5 August 2022.

Interstate trades are typically accompanied by a reassignment of physical water (resource) in storages from the selling state to the buying state. Due to full storages and ongoing wet conditions, there is limited capacity to hold reassigned resource and a high risk that any resource which is reassigned will spill. Therefore, interstate trades into NSW cannot be safely underpinned by resource. Should NSW accept incoming interstate trades, it is likely that it may have to lean on current resources, which have already been allocated, to meet the trade. This would adversely impact existing NSW Murray allocations and water users. Therefore, a temporary restriction on interstate trades into NSW has been put in place to protect NSW water users.

The temporary restriction will remain in force until 31 December 2022, unless repealed earlier should NSW storage levels reduce sufficiently to safely receive traded water.

More information on temporary water restrictions can be found at the following link: 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 (i.e. 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



Without-debit-take from uncontrolled flows by individual general security entitlement holders is subject to the following rules:

- 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
 - o 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 <u>plus</u> 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 <u>plus</u> 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 the licence conditions of their individual licences for further details of rules applicable to their entitlements.

Next announcement

The next water allocation statement will be published on **Thursday 1 September 2022.** It will be a short statement, updating any improvements in resource and allocations.

The next comprehensive statement, including the likely improvement in general security allocations under various inflow scenarios, will be published on Thursday 15 September 2022.

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

Murrumbidgee resource assessment data sheet

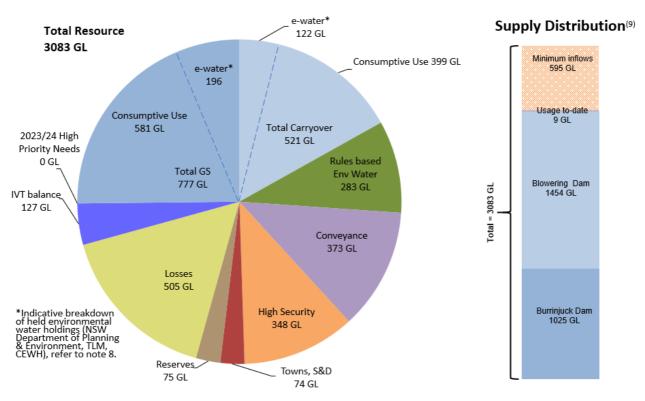
Resource Distribution* (15 August) for 2022/23	Volume (GL)	
Total Available Resource (1)	3,083	
less		
Carryover (8)	521	
Rules based Environmental Water (2)	283	



Towns, Stock, Domestic (100%)	74	
Reserves (3)	75	
Conveyance (4)	373	
Announced High Security (95%)	348	
Losses (transmission, evaporation, operational) (5)	505	
Murrumbidgee IVT account (carryover on 1 July) (6)	127	
Announced General Security (41%) (8)	777	
Year 2 (2023-24) high priority needs ⁽⁷⁾	0	

^{*}See notes below

Murrumbidgee resource distribution 2022/23 – 15 August 2022



^{*}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 (2022/23) is estimated to be about 465 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 179 GL) and environmental water allowances (EWA1 = 75 GL, EWA2 = 29 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 2022/23. Does not necessarily reflect the current IVT balance.
- 7) 2023-2024 high priority needs on 1 July 2023 volume set aside to cover high priority needs on 1 July 2023, for 'Year 2', including potential 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 196 GL of GS, 15 GL of HS, 60 GL of conveyance allocation and 122 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, The Living Murray and the Commonwealth Environmental Water Holder. 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).

Comparison with this time last year

Item		Mid Aug 2021 (GL)	Mid Aug 2022 (GL)	Comments
	Burrinjuck	907	1,034	(includes dead storage)
Storage Volume (GL)	Blowering	1,507	1,572	(includes dead storage but does not account for Blowering Airspace requirements)
	Total	2,414	2,606	Greater
Losses (transmission, evaporation, operations)		444	505	Higher losses anticipated in 2022 under dry conditions
1 July IVT carryover balance		92	127	Higher IVT in 2022
GS Allocation		52%	41%	Lower in 2022 due to various factors including higher commitments (IVT, EWA and losses)
Average GS Carryover		22%	28%	Greater in 2022/23

Chances of improvement

The chances of improved general security allocations, based on a repeat of historical inflows, are provided in the following table under a variety of conditions. The forecast is based on all available historical data, which is appropriate given the seasonal outlook, and gives a better outlook than using just the driest years on record (dry tercile). To be clear, the analysis considers historical data and does not explicitly consider the likely wet conditions in the seasonal rainfall forecast.

It is important to note these estimates are indicative improvements only and are not guaranteed allocations.

Estimates and actual allocations may change based on weather conditions, water user behaviour, water management decisions and other operational matters. This means water users should use this information with caution and at their own risk.



Forecast general security allocations (%)

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

Repeat of historical inflow cor	ditions	1 Oct 2022	1 Feb 2023
99 chances in 100 (extreme)	(99%)	41%*	41%*
9 chances in 10 (very dry)	(90%)	41%*	41%*
3 chances in 4 (dry)	(75%)	41%*	41%*
1 chance in 2 (mean)	(50%)	43%*	52%*
1 chance in 4 (wet)	(25%)	43%*	100%*

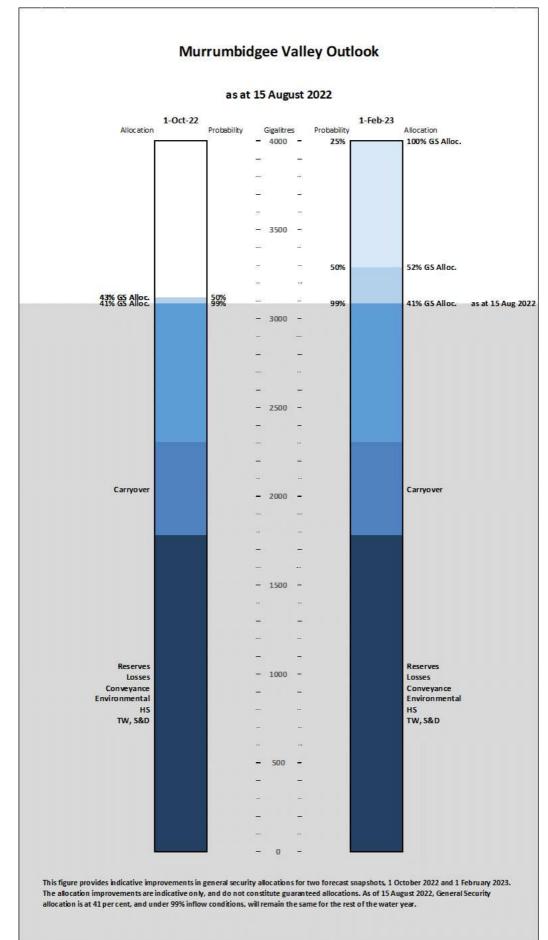
Note 1: Estimated values indicative only, not guaranteed and subject to change based on actual events unfolding. Note 2: Forecast assumes 28% general security carryover on average.

Note 3: Physical spills limit resource improvements as inflows are unable to be captured. Actual resource improvements will be highly dependent on the pattern of inflows and demands experienced over the coming months. With storages full, and future inflows at high risk of partial spill, there is high uncertainty in the numbers provided above.

Note 4: In the Murrumbidgee valley, general security (GS) account limit is 100% and carryover limit is 30%.

^{*}Does not incorporate potential improvement from IVT account spilling, expected to be around 3 – 5%.







Allocations in 2022/23

Date	License Category	Increment	Total 2022/23
1-Jul	Domestic & Stock	100%	100%*
1-Jul	Local Water Utility	100%	100%*
1-Jul	High Security (sub- categories)	100%	100%*
1-Jul	High Security	0.95 ML/unit share	0.95 ML/unit share
1-Jul	Supplementary (lowbidgee)	1.00 ML/unit share	1.00 ML/unit share*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share*
1-Jul	General Security	0.35 ML/unit share	0.35 ML/unit share
1-Jul	Conveyance	0.35 ML/unit share	0.35 ML/unit share
1-Jul	Murrumbidgee Irrigation Conveyance	0.7654 ML/unit share	0.7654 ML/unit share
1-Jul	Coleambally Irrigation Conveyance	0.8585 ML/unit share	0.8585 ML/unit share
15-Jul	General Security	0.03 ML/unit share	0.38 ML/unit share
15-Jul	Conveyance	0.03 ML/unit share	0.38 ML/unit share
15-Jul	Murrumbidgee Irrigation Conveyance	0.0204 ML/unit share	0.7858 ML/unit share
15-Jul	Coleambally Irrigation Conveyance	0.0175 ML/unit share	0.8760 ML/unit share
15-Aug	General Security	0.03 ML/unit share	0.41 ML/unit share
15-Aug	Conveyance	0.03 ML/unit share	0.41 ML/unit share
15-Aug	Murrumbidgee Irrigation Conveyance	0.0204 ML/unit share	0.8062 ML/unit share
15-Aug	Coleambally Irrigation Conveyance	0.0136 ML/unit share	0.8896 ML/unit share

^{*}Maximum allowable



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 the following link: www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

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