Water availability and allocation update



15 October 2021

Murrumbidgee Valley

Water allocation update

Murrumbidgee regulated river water source allocation to general security licences has increased by 11%. Cumulative allocations for general security now total 63% of entitlement for the 2021-22 water year. Incorporating carryover, average general security water availability is approximately 85%.

Wet conditions have kept storages full, prompting ongoing airspace releases and supplementary access across the regulated valley. Water users can monitor the WaterNSW website (waterinsights.waternsw.com.au/) for publication of supplementary announcements.

The resource improvement underpinning the allocation increase has accrued from a number of sources. Continuing wet conditions mean that unregulated water is meeting system demands. In conjunction with demand ramping up, this is freeing up regulated resource for further allocation.

Additionally, a favourable outlook within the Snowy scheme for the 2022-23 water year and the trigger of the Provisional Storage Volume (PSV1) reserve account, means all high priority needs for 2022-23 are assured without the assistance of any reserves this year. Also, the allocation increase is causing without-debit-take to convert to debit-take, freeing resource to boost allocations.

Under current conditions, as resource availability improves and accounts reach their limits, it is usual that allocations increase rapidly. It is estimated that about 250,000 megalitres (ML) more improvement is required to reach full allocations in the Murrumbidgee regulated valley.

Further information is provided below on general security allocation outlooks for the remainder of this water year.

2021-22	High Security	General Security	Average Carryover
Murrumbidgee	95%	63%	22%

Storage levels (as at 14 October 2021)

- Blowering Dam is 96% full stable holding about 1,561,000 ML.
- Burrinjuck Dam is 91% full stable holding about 939,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for November 2021 to January 2022 indicates that rainfall is likely to be above average across the catchment. Daytime temperatures are likely to be near or below average, while overnight temperatures are likely to be warmer than average.

The Bureau's El Niño-Southern Oscillation is neutral; however, the Bureau has put out an ALERT status for La Niña in the coming months. The negative Indian Ocean Dipole event is on the threshold of returning to neutral. A negative IOD increases the chances of above-average spring rainfall for much of southern and eastern Australia.





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

Trade

The normal operating range for the Murrumbidgee IVT account is between 0 GL and 100 GL. Trade **out** of the Murrumbidgee is **closed**, while trade **into** the Murrumbidgee Valley is **open** (as of 14 October 2021). 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 has carried forward into this water year.

Next announcement

The next water allocation statement will be published on **Monday 1 November 2021**. It will be a short statement, updating any improvements in resource and allocations.

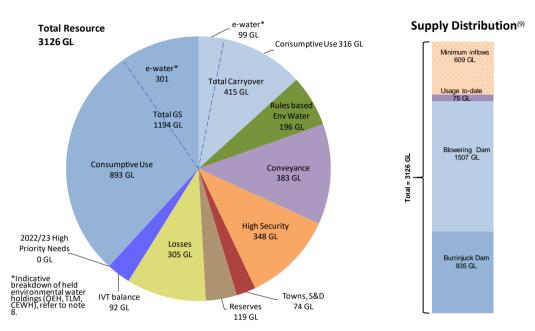
Murrumbidgee resource assessment data sheet

Resource Distribution* (15 October) for 2021-22	Volume (GL)
Total Available Resource (1)	3,126
less	
Carryover (8)	415
Rules based Environmental Water (2)	196
Towns, Stock, Domestic (100%)	74
Reserves (3)	119
Conveyance (4)	383
Announced High Security (95%)	348
Losses (transmission, evaporation, operational) (5)	305
Murrumbidgee IVT account (carryover on 1 July) (6)	92
Announced General Security (63%) (8)	1,194
Year 2 (2022-23) high priority needs (7)	0

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Murrumbidgee resource distribution 2021-22 - 15 October 2021



*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 (2021-22) is estimated to be about 433 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 101 GL) and environmental water allowances (EWA1 = 53 GL, EWA2 = 42 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 = 69 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 2021-22. Does not reflect the current IVT balance.
- 7) 2022-2023 high priority needs on 1 July 2022 volume set aside to cover high priority needs on 1 July 2022, 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 301 GL of GS, 15 GL of HS, 73 GL of conveyance allocation and 99 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, Industry and Environment (DPIE), The Living Murray (TLM) and the Commonwealth Environmental Water Holder (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).

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Comparison with 2020-21

Item		Mid Oct 2020 (GL)	Mid Oct 2021 (GL)	Comments
	Burrinjuck	809	939	(includes dead storage)
Storage Volume (GL)	Blowering	1,304	1,561	(includes dead storage)
	Total	2,113	2,518	Stored water from 20/21 bolstering resources in 21/22.
Losses (transmission, evaporation, operations)		424	305	Lower delivery losses in 2021 due to unregulated conditions covering loss requirements.
1 July IVT carryover balance		6	92	
GS Available		54%	63%	Higher in 2021/22.
Average GS Carryover		18%	22%	

Chances of improvement

Each resource assessment assumes that current river flows will reduce to extreme dry (99% AEP) conditions. This is a safe assumption, but water users can use the following inflow scenarios to plan for potential future allocation announcements. The chances of improved general security allocations, based on a repeat of historical inflows, are provided in the following table under a range of conditions. The forecast is appropriately based on all available historical data.

It is important to note that these estimates are indicative improvements only and are not guaranteed allocations. Estimates may change based on weather conditions, water management decisions and river operations. 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 co	1 Feb 2022	
99 chances in 100 (extreme) (99%)	63%
9 chances in 10 (very dry) (90%)	68%
3 chances in 4 (dry) (75%)	100%
1 chance in 2 (mean) ((50%)	100%
1 chance in 4 (wet)	25%)	100%

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

Note 2: Forecast assumes 22% 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.



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Note 5: In the Murrumbidgee valley, general security (GS) account limit is 100% and carryover limit is 30%. Once allocations reach 70%, accounts start spilling, aiding in rapid allocation increases, resulting in 100% GS announcement for 75% inflow conditions or wetter by 1 February 2022.

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