Water availability and allocation update



15 September 2021

Murrumbidgee Valley

Water allocation update

There is no change to Murrumbidgee regulated river water allocations. Cumulative allocation for general security in 2021-22 remains at a total 52% of entitlement. Incorporating carryover, average general security water availability is approximately 74%.

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

With full storages, airspace is not available to capture new resources and substantially improve resources to facilitate further allocations. However, as demand ramps up in the coming weeks, it is expected that allocations will improve significantly on the back of higher than minimum inflows.

General security water users have been exercising their uncontrolled flow access provisions taking water without-debit. This will boost allocations when they become available. This is because the usage, coupled with private carryover already credited to accounts, causes account limits to be reached earlier and therefore allocations to go further.

It is estimated that water availability improvements equating to around 20% of general security allocation is all that is required to reach full general security allocation. This statement includes indicative forecast improvements to general security under various inflow conditions.

2021-22	High Security	General Security	Average Carryover
Murrumbidgee	95%	52%	22%

Storage levels (as at 14 September 2021)

- Blowering Dam is 94% full stable holding about 1,540,000 megalitres (ML).
- Burrinjuck Dam is 96% full falling holding about 985,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for October to December indicates that rainfall is likely to be above average across the catchment. Temperatures are likely to be near or warmer than average.

The Bureau's El Niño-Southern Oscillation is neutral. Models indicate that negative Indian Ocean Dipole (IOD) conditions have developed and may persist until summer. Negative IOD conditions increase the chances of above average rainfall in winter-spring.

For further details: www.bom.gov.au/climate/outlooks/#/overview/summary

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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 September 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 **Friday 1 October 2021**. It will be a short statement, updating any improvements in resource and allocations.

The next comprehensive statement, including likely improvements in general security allocations under various inflow scenarios, will be published on Friday 15 October 2021.

Murrumbidgee resource assessment data sheet

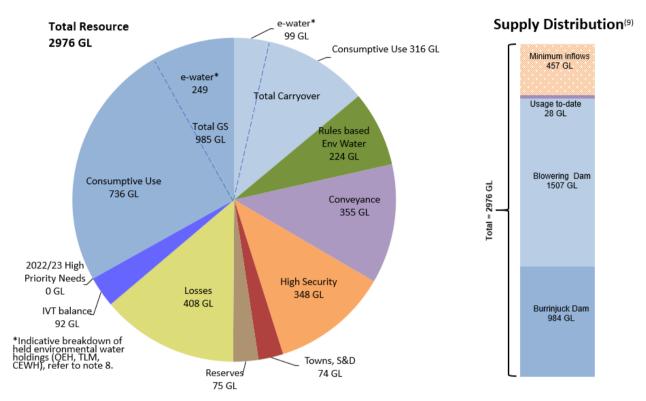
Resource Distribution* (15 September) for 2021-22	Volume (GL)
Total Available Resource (1)	2,976
less	
Carryover (8)	415
Rules based Environmental Water (2)	224
Towns, Stock, Domestic (100%)	74
Reserves (3)	75
Conveyance (4)	355
Announced High Security (95%)	348
Losses (transmission, evaporation, operational) (5)	408
Murrumbidgee IVT account (carryover on 1 July) (6)	92
Announced General Security (52%) (8)	985
Year 2 (2022-23) high priority needs (7)	0

^{*}See notes below

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Murrumbidgee resource distribution 2021-22 - 15 September 2021



Data sheet notes

- 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 390 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 138 GL) and environmental water allowances (EWA1 = 53 GL, EWA2 = 33 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 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 249 GL of GS, 15 GL of HS, 67 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 Sep 2020 (GL)	Mid Sep 2021 (GL)	Comments
Storage Volume (GL)	Burrinjuck	843	987	(includes dead storage)
	Blowering	1,274	1,531	(includes dead storage)
	Total	2,117	2,518	Stored water from 20/21 bolstering resources in 21/22.
Losses (transmission, evaporation, operations)		472	408	Lower delivery losses in 2021 due to unregulated conditions covering loss requirements.
1 July IVT carryover balance		6	92	
GS Available		46%	52%	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 conditions	1 Nov 2021	1 Feb 2022
99 chances in 100 (extreme) (99%)	52%	52%
9 chances in 10 (very dry) (90%)	52%	52%
3 chances in 4 (dry) (75%)	54%	54%
1 chance in 2 (mean) (50%)	61%	65%
1 chance in 4 (wet) (25%)	64%	100%

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

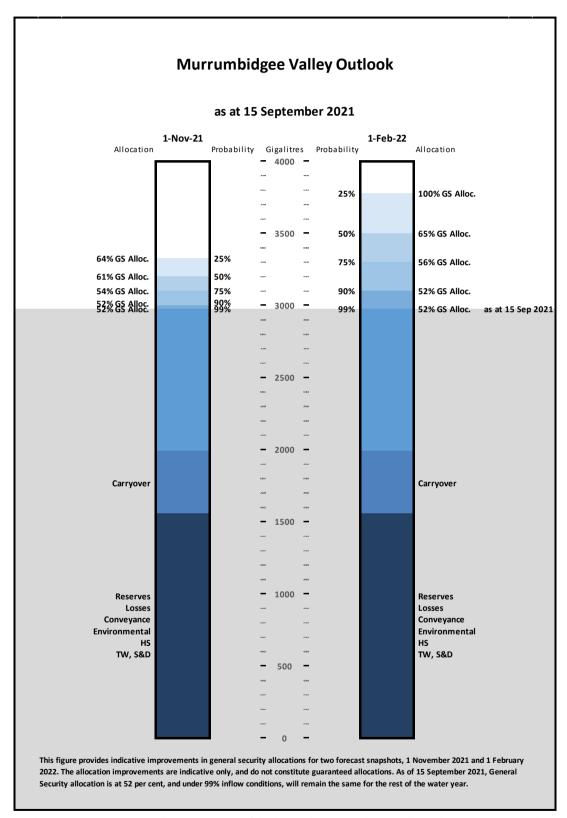
Note 5: In the Murrumbidgee valley, general security (GS) account limit is 100% and carryover limit is 30%. Once allocations reach 70%, accounts start spilling, aiding in rapid allocation increases, resulting in 100% GS announcement for 25% inflow conditions by 1 February 2022.

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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