

16 November 2020

Murrumbidgee Valley

Water allocation update

Murrumbidgee regulated river water source allocation to general security licences has increased by a further 8%. This brings the total allocation this year to 74% of entitlement.

Receding flows from early November rainfall has continued to yield further improvement. Inflows above minimums into storages and significant inflows from downstream tributaries helped meet demand and reduce losses, therefore providing more water for allocations.

As individual water user accounts fill and, depending on their carryover volume, reach their limit, then small resource improvements can translate into large allocation increases, because full accounts cannot benefit from further resource improvements. Accounts with a credit of 26% or more in carryover water are already full by virtue of this 74% allocation.

2020-21	High Security	General Security	Average Carryover	Drought Stage
Murrumbidgee	95%	74%	18%	 Stage 1

Drought stage

The Murrumbidgee regulated river water source is in Stage 1 drought criticality, meaning all allocated water can be delivered under normal regulated river operations. The resource situation continues to be monitored closely to ensure that high priority needs remain secure.

Further information on critical valleys in drought can be found at:

www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/critical-valleys-in-drought

Storage levels (as at 13 November 2020)

- Blowering Dam is 87% full – rising – holding 1,420,000 ML.
- Burrinjuck Dam is 94% full – falling – holding 965,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for December 2020 to February 2021 indicates likely wetter than average conditions across the catchment. Daytime temperatures are likely to be around average to warmer than average, and night temperatures very likely to be warmer than average.

The Bureau has declared La Niña conditions, with models indicating that La Niña conditions will likely persist until at least the end of summer. Indian Ocean Dipole (IOD) is neutral, with the majority of models indicating that the IOD will remain neutral over the coming months. The Southern Annular Mode (SAM) is expected to remain positive in the coming weeks. La Niña conditions and positive SAM are supporting the likelihood of above average rainfall.

For further details: 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 Valley is **closed** (as at 13 November 2020) with the IVT balance at its upper limit. Trade **into** the Murrumbidgee Valley is **open**. Water users should check the WaterNSW website (www.waternsw.com.au) for daily information about the IVT account balance and the status of trade.

Next announcement

The next water allocation statement will be published on **Tuesday 1 December 2020**. It will be a short statement, updating any improvements in resource and allocations.

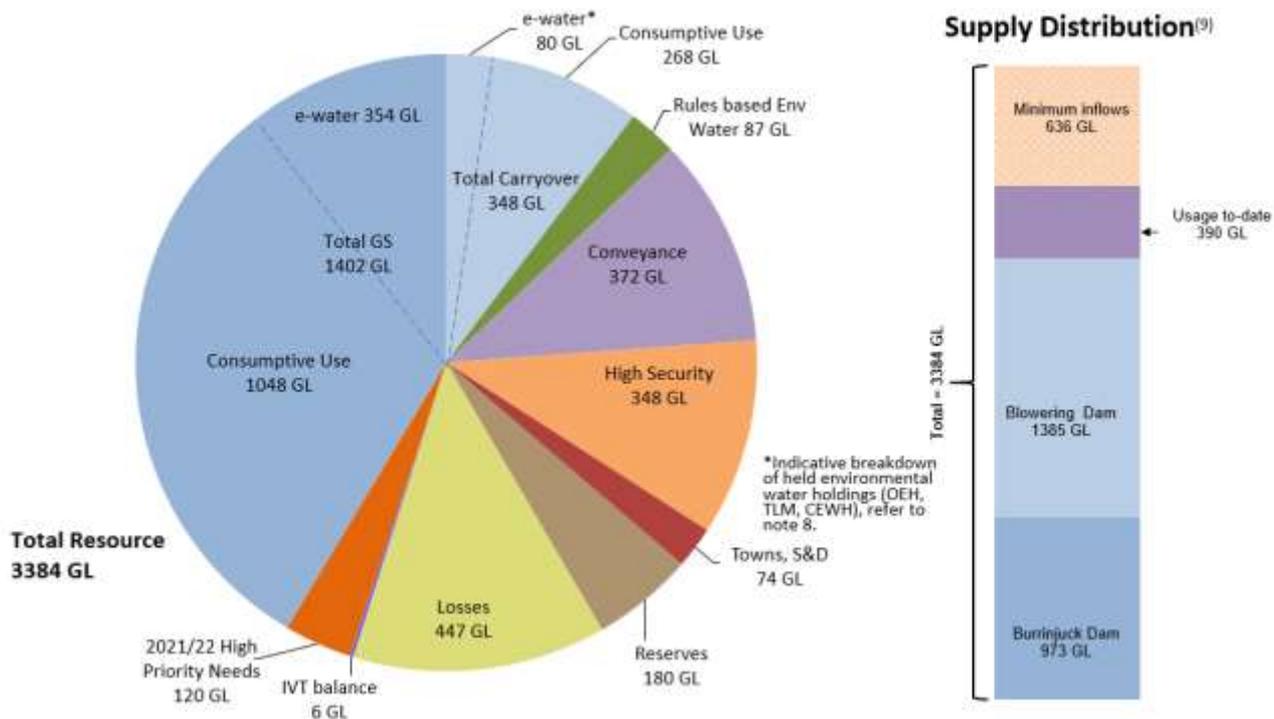
The next comprehensive statement will be published on Tuesday 15 December 2020. It will include the last 'Chances of Improvement' forecast for this water year. Statements will then resume in mid-January, and in mid-March will begin to forecast opening allocations for 2021/22. However, conditions will be closely monitored, and announcements made if significant changes emerge.

Murrumbidgee resource assessment data sheet

Resource Distribution* (16 November) for 2020-21	Volume (GL)
Total Available Resource ⁽¹⁾	3,384
less	
Carryover ⁽⁸⁾	348
Rules based Environmental Water ⁽²⁾	87
Towns, Stock, Domestic (100%)	74
Reserves ⁽³⁾	180
Conveyance ⁽⁴⁾	372
Announced High Security (95%)	348
Losses (transmission, evaporation, operational) ⁽⁵⁾	447
Murrumbidgee IVT account (carryover on 1 July) ⁽⁶⁾	6
Announced General Security (74%) ⁽⁸⁾	1,402
Year 2 (2021-22) high priority needs ⁽⁷⁾	120

*See notes below

Murrumbidgee resource distribution 2020-21 – 16 November 2020



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 releases to date for this water year (2020-21) is estimated to be about 380 GL (includes montane releases).
- 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 74 GL) and environmental water allowances (EWA1 = 12 GL, EWA2 = 1 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 = 129 GL, PSV2 = 1 GL).
- 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. Current carryover on conveyance entitlements in the valley is about 5 GL.
- 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 2020-21. Does not reflect the current IVT balance.
- 7) 2021-2022 high priority needs on 1 July 2021 - volume set aside to cover high priority needs on 1 July 2021, for ‘Year 2’, including potential carryover. Any late season inflows are also included in this volume.
- 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 354 GL of GS, 15 GL of HS, 74 GL of conveyance allocation and 80 GL of GS carryover. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Office of Environment and Heritage (OEH), The Living Murray (TLM) and the Commonwealth Environmental Water Holder (CEWH). Details on e-water 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).

Murrumbidgee Resource Assessment – comparison with this time last year

Item		Mid Nov 2019 (GL)	Mid Nov 2020 (GL)	Comments
Storage Volume (GL)	Burrinjuck	343	976	Improved inflow conditions
	Blowering	993	1409	Improved inflow conditions
	Total	1,236	2,385	93% higher storage volume compared to last year
Losses (transmission, evaporation, operations) *		352	447	Higher budget for higher allocations
1 July IVT carryover balance		24	6	Reflects market trade
GS Available		6%	74%	Improved resources in 2020/21
Average GS Carryover		8%	18%	Higher Carryover

* Includes assumed loss from downstream of storages along the entire river length.

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).

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, as it projects many months ahead.

Forecast general security allocation (per cent)

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

Repeat of historical inflow conditions	1 Feb 2021
99 chances in 100 (extreme) (99%)	74
9 chances in 10 (very dry) (90%)	76
3 chances in 4 (dry) (75%)	100
1 chance in 2 (median) (50%)	100

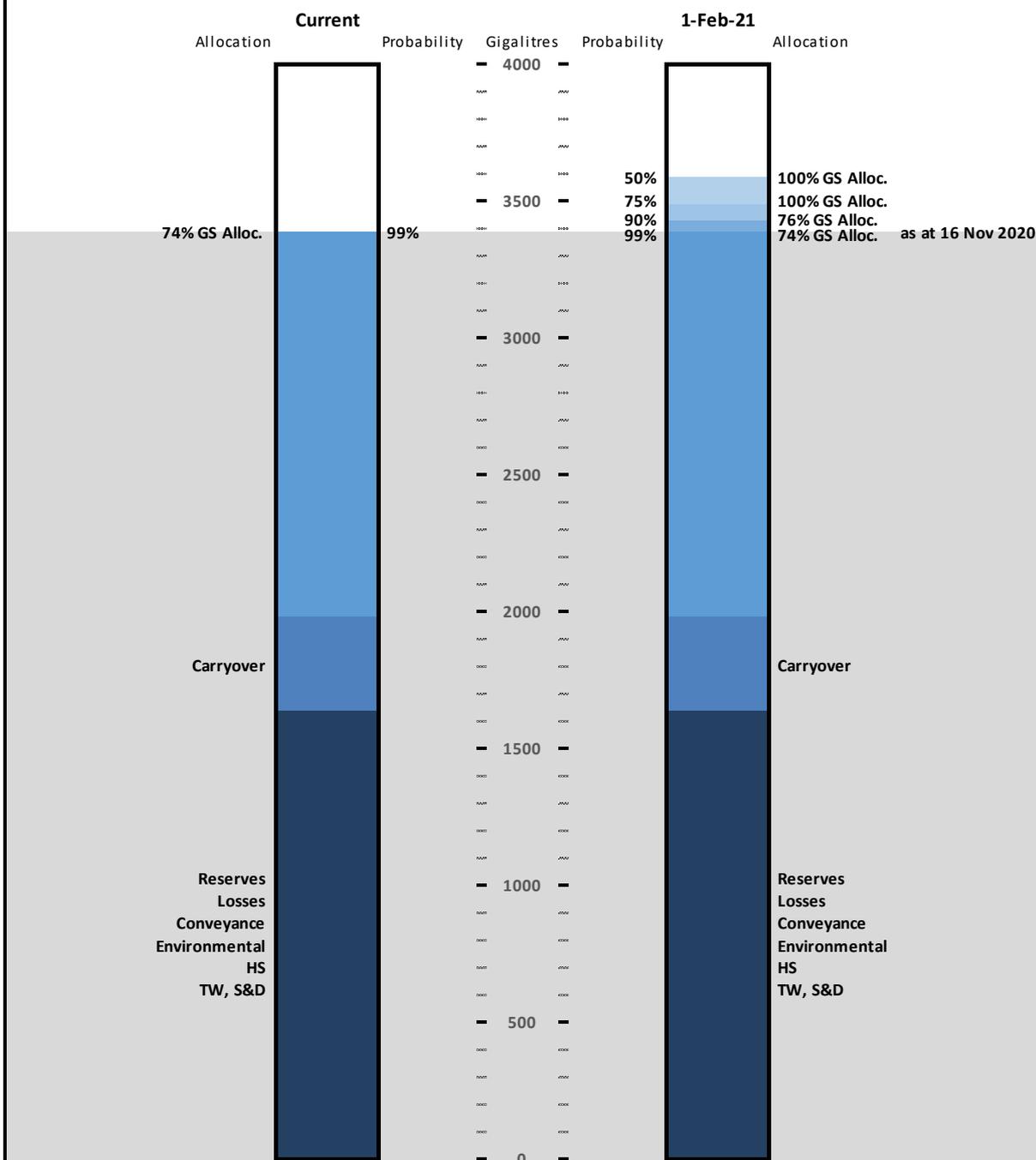
Note 1: Estimated values indicative only, not guaranteed and subject to change based on actual events unfolding.

Note 2: Storage behaviour modelling using all years and general security carryover of 18%.

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Murrumbidgee Valley Outlook

as at 16 November 2020



This figure provides indicative improvements in general security allocations for the forecast period up to 1 February 2021. The allocation improvements are indicative only, and do not constitute guaranteed allocations. As of 16 November 2020, General Security allocation is at 74 per cent, and under 99% inflow conditions, will remain the same for the rest of the water year.