

15 December 2020

Murrumbidgee Valley

Water allocation update

Murrumbidgee regulated river water source **allocation to general security licences has increased by 1%**. This brings the total allocation this water year to 77% of entitlement.

Inflows and reduced losses have resulted in a small improvement in the Murrumbidgee regulated valley. The improvement has been allocated to general security entitlements, with a commensurate increase to Conveyance entitlements, in accordance with the water sharing plan.

Water users should note that the general security account limit is 100% of entitlement. Therefore, water users who have carried over 23% or more on their general security entitlement have reached their account limit by virtue of the total allocation increasing to 77% this water year and will not benefit from further allocation increases.

2020-21	High Security	General Security	Average Carryover	Drought Stage
Murrumbidgee	95%	77%	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 future 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 14 December 2020)

- Blowering Dam is 87% full – falling – holding 1,420,000 megalitres (ML).
- Burrinjuck Dam is 85% full – falling – holding 875,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for January 2021 to March 2021 indicates that climate conditions are likely to be average to wetter than average. Daytime temperatures are likely to be average to above average, while overnight temperatures are very likely to be above average.

The Bureau has declared La Niña conditions, with models indicating that La Niña conditions will likely persist through to late summer or early autumn. The Southern Annular Mode is neutral, but is forecast to return to positive values over the coming weeks. A positive SAM typically enhances the wet signal of La Niña in parts of eastern Australia.

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 14 December 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

No statement will be published on 1 January 2021. The next water allocation statement will be published on **Friday 15 January 2021**. Conditions will be monitored closely over the holiday season and if heavy rainfall leads to significant improvement in water availability, an interim allocation announcement will be provided.

With peak irrigation season setting in and watering commitments firming, this statement is the last statement for this water year that includes information on potential improvements to general security allocation under various inflow conditions.

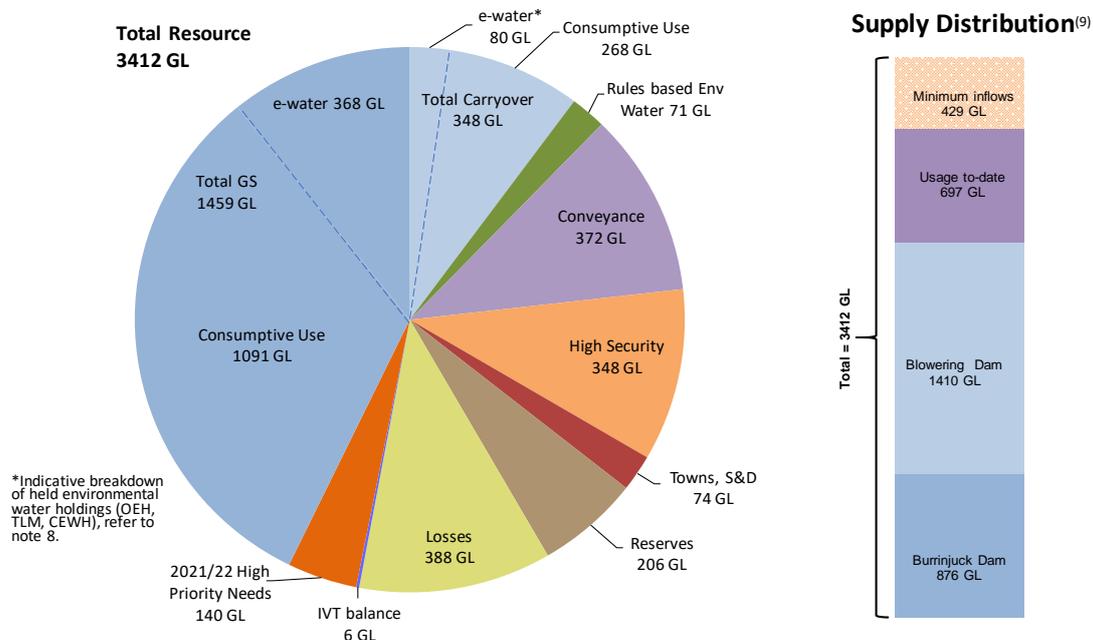
From March 2021, the mid-monthly statements will start to focus on the potential water availability on 1 July 2021 for the 2021-22 water year. It will be updated monthly. This should help water users with their end of year water management decisions.

Murrumbidgee resource assessment data sheet

Resource Distribution* (15 December) for 2020-21	Volume (GL)
Total Available Resource ⁽¹⁾	3,412
less	
Carryover ⁽⁸⁾	348
Rules based Environmental Water ⁽²⁾	71
Towns, Stock, Domestic (100%)	74
Reserves ⁽³⁾	206
Conveyance ⁽⁴⁾	372
Announced High Security (95%)	348
Losses (transmission, evaporation, operational) ⁽⁵⁾	388
Murrumbidgee IVT account (carryover on 1 July) ⁽⁶⁾	6
Announced General Security (77%) ⁽⁸⁾	1,459
Year 2 (2021-22) high priority needs ⁽⁷⁾	140

*See notes below

Murrumbidgee resource distribution 2020-21 – 15 December 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 476 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 65 GL) and environmental water allowances (EWA1 = 12 GL, EWA2 = 0 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 = 156 GL, PSV2 = 1GL).
- 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 368 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 Dec 2019 (GL)	Mid Dec 2020 (GL)	Comments
Storage Volume (GL)	Burrinjuck	334	876	Improved inflow conditions
	Blowering	719	1,410	Improved inflow conditions
	Total	1,053	2,286	117% higher storage volume in 2020/21
Losses (transmission, evaporation, operations) *		278	388	Higher budget for higher allocations
1 July IVT carryover balance		24	6	Reflects market trade
GS Available		6%	77%	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.

This will be the last statement for this water year to include forecast improvements in general security allocation under various inflow conditions. Forecasting will recommence in mid-March for 2021-22 outlooks.

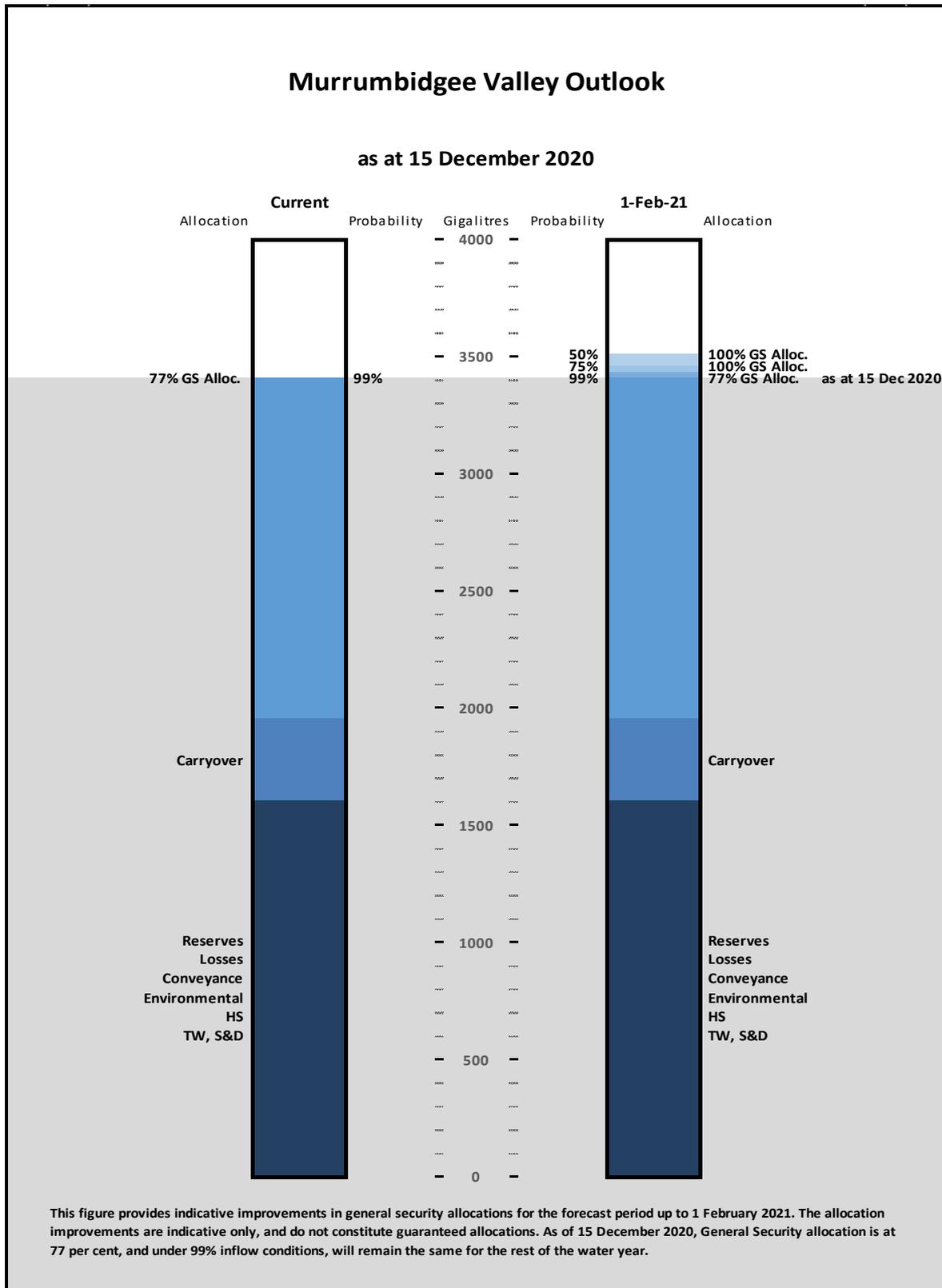
Forecast general security allocation (per cent)

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

Repeat of historical inflow conditions	1 Feb 2021
99 chances in 100 (extreme) (99%)	77
9 chances in 10 (very dry) (90%)	100
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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