



15 November 2017

Murrumbidgee Valley

Water allocation update

Allocations

There is **no increase in Murrumbidgee regulated river general security allocations** at this time. They remain unchanged at 33 per cent of entitlement.

There has been no significant improvement in resources, with inflows into the storages being limited due to intermittent and patchy rainfall since the last assessment.

With general security allocation plus carryover having reached 60 per cent, the next available water must be allocated to the environmental water account (EWA1) and the provisional storage volume account (PSV1), some 50,000 and 25,000 megalitres respectively, in accordance with the water sharing plan rules.

Once these commitments are met, and there is confidence about high security and likely carryover commitments for next year, further improvement in water availability can then accrue to general security entitlements.

	High Security	General Security	Average Carryover
Murrumbidgee	95%	33%	27%

Storage levels (as at 13 November)

- Blowering Dam is 60 per cent full – steady – holding 993,922 megalitres (ML).
- Burrinjuck Dam is 60 per cent full – steady – holding 623,253 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for November to January indicates average rainfall conditions are generally likely. Overnight temperatures are also likely to be above average over the three month period. Daytime temperatures will likely be above average in November, cooling towards average temperatures in December.

While the Bureau of Meteorology predicts an even chance of La Niña forming in the remainder of this year, should this occur, it is expected to be short lived and weak. Current temperature patterns in the Indian Ocean would typically push Australia's climate into a drier phase, hence the typical above average rainfall patterns associated with La Niña are not expected. A weak La Niña could also result in prolonged heatwaves for southeast Australia.

Trade

Trade **out** and **within** the Murrumbidgee Valley is open, but trade **into** the Murrumbidgee Valley is closed. Water users are encouraged to monitor the WaterNSW website at - <http://www.watersw.com.au/customer-service/trading/murrumbidgee> - for information regarding the Murrumbidgee inter-valley trade (IVT) account balance and status of trade.

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Next announcement

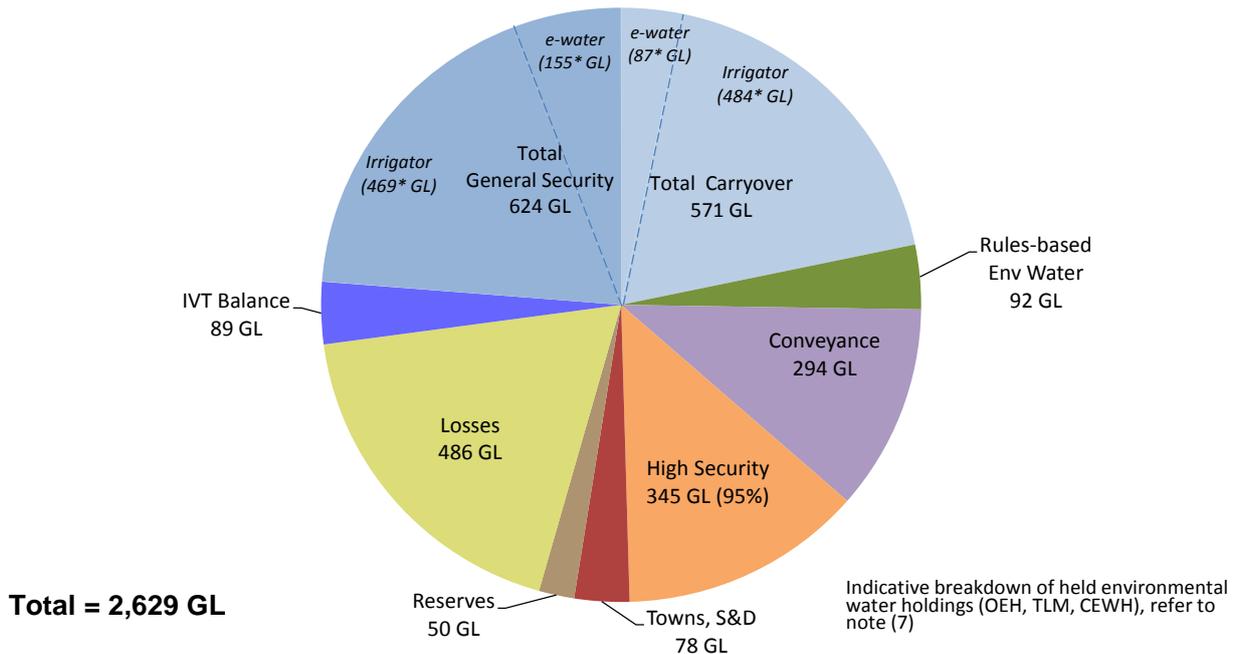
The next allocation update for the Murrumbidgee regulated river valley is expected to be on **Friday 1 December 2017**, followed by Friday 15 December 2017.

Murrumbidgee Resource Assessment Data Sheet

Resource Distribution (15 November) for 2017-18	
	Volume (GL)
Total Available Resource ⁽¹⁾	2,629
less	
Carryover (GS and Conveyance)	571
Rules based Environmental Water ⁽²⁾	92
Towns, Stock, Domestic	78 (100%)
Reserves ⁽³⁾	50
Conveyance ⁽⁴⁾	294
Announced High Security	345 (95%)
Losses (transmission, evaporation, operational) ⁽⁵⁾	486
Murrumbidgee IVT balance (at 1 July – ie. carryover)	89
Late Season Discount ⁽⁶⁾	0
Announced General Security	624 (33%)

**See notes below.*

**Resource Distribution 2017-18
Murrumbidgee Valley - 15 November 2017**



Notes

- 1) Total available resource – total active storage volume (Blowering & Burrinjuck Dams) at the day of assessment plus any usable flows in transit plus drought inflows for rest of the year plus estimated usage to date including Snowy Hydro's net Jounama Release of 451 GL from 1 May 2017 to 10 November 2017.
- 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 75 GL) and environmental water allowances (EWA1, EWA2 & EWA3) – balance currently 17GL. Excludes 'licence-based' environmental water also known as held environmental water (HEW). This total volume typically reduces as commitments are met and 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 plus any Provisional Storage Volumes (PSV1 & PSV2).
- 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. (This category of licence in the Murrumbidgee valley, like general security, can carry over up to 30% of entitlement).
- 5) Losses – is 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 regularly updated as the year unfolds.
- 6) Late Season Discount – is the estimated inflow volume that will arrive into storage late in the year, after the peak irrigation demand season (usually post-February). This water cannot be allocated to water users at the start of the water year otherwise there could be an expectation that the water is available for use before it is captured in storage.
- 7) Held environmental water (HEW) – As a trial, general security allocation and carryover water administered by the environmental water holder has been identified in the above pie chart. This reporting of held environmental water is total allocated in accounts (not usage) and includes 155GL of GS, 12GL of HS, 39GL of conveyance allocation and 87GL 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). Interested parties should refer to individual Agency websites for more detailed information on held environmental water holdings.

Murrumbidgee Resource Assessment – Comparison with this time last year

Item		Mid Nov 2016 (GL)	Mid Nov 2017 (GL)	Comments
Storage Volume (GL)	Burrinjuck	991	620	Lower due to low inflows
	Blowering	1,553	1,012	
	Total	2,544	1,632	
Losses (transmission, evaporation, operational)*		334	485	Higher due to persistent dry weather
1 July IVT carryover balance		100	89	Similar
Late Season Inflows		0	0	Same
GS Available		71%	33%	Lower allocation due to below average inflows
Average GS Carryover		19%	27%	Substantially higher this year

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

Chances of improvement

The chances of inflows being above historical minimums, and therefore the likelihood of improved allocations, are provided in the following table.

Potential allocations are generally much lower than previously forecast because conditions have remained unseasonably dry in the last month, as well as nearing the end of the winter/spring period when significant inflow volumes are more likely to occur. The graph below shows that apart from the February 2012 flood, significant inflows are less likely after November and the current inflow conditions are plotting well below the long term average.

As a drought inflow sequence starting in December produces approximately 190,000 megalitres less inflow than the November sequence, it is estimated that a combined dam and tributary inflow volume in excess of 250,000 megalitres will be required in the next two months before a further allocation can be made in February 2018, hence the limited improvement forecast in the table below.

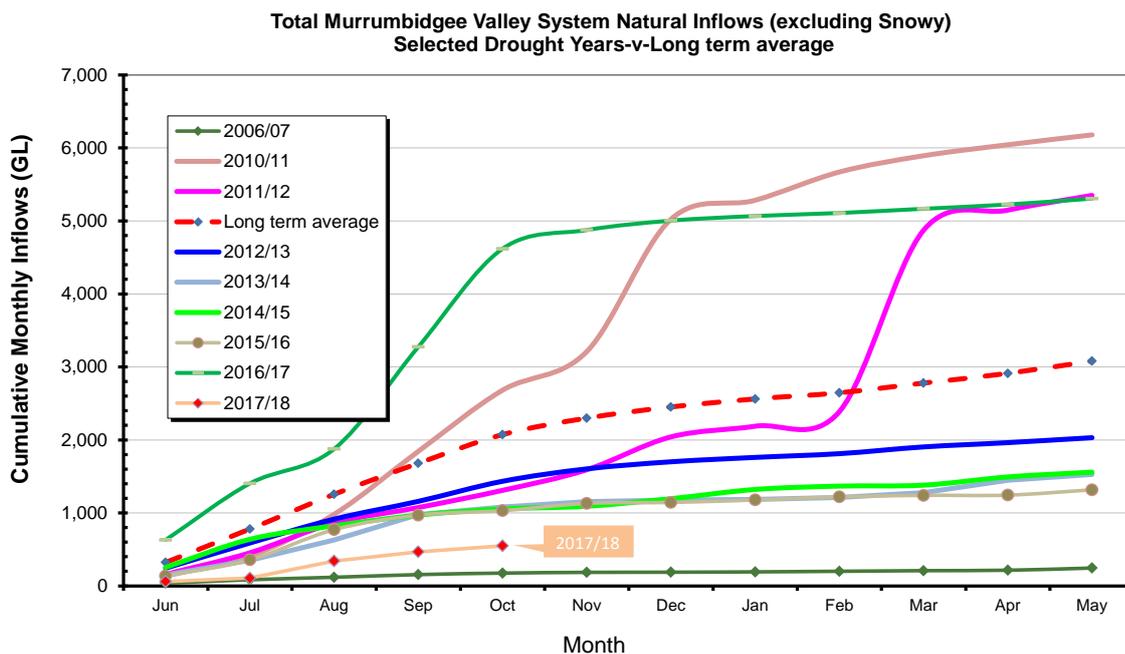
However, it must be remembered that these are probabilities based on long-term historical records only, and that significant inflow events can in fact occur at any time.

MURRUMBIDGEE Potential Inflow Conditions #	Forecast 1 Dec 2017 General Security Allocations^	Forecast 1 Feb 2018 General Security Allocations^
Current allocation (99% inflows)	33%	33%
9 chances in 10 (very dry) (90%)^^	33%	33%
3 chances in 4 (dry) (75%)	33%	33%
1 chance in 2 (average) (50%)	33%	33%
1 chance in 4 (wet) (25%)	33%	37%

Using all years of inflow records.

^ Licence holders can add individual carryover to the relevant percentage.

^^ Currently tracking a bit drier than here.



NSW Murrumbidgee Valley Outlook

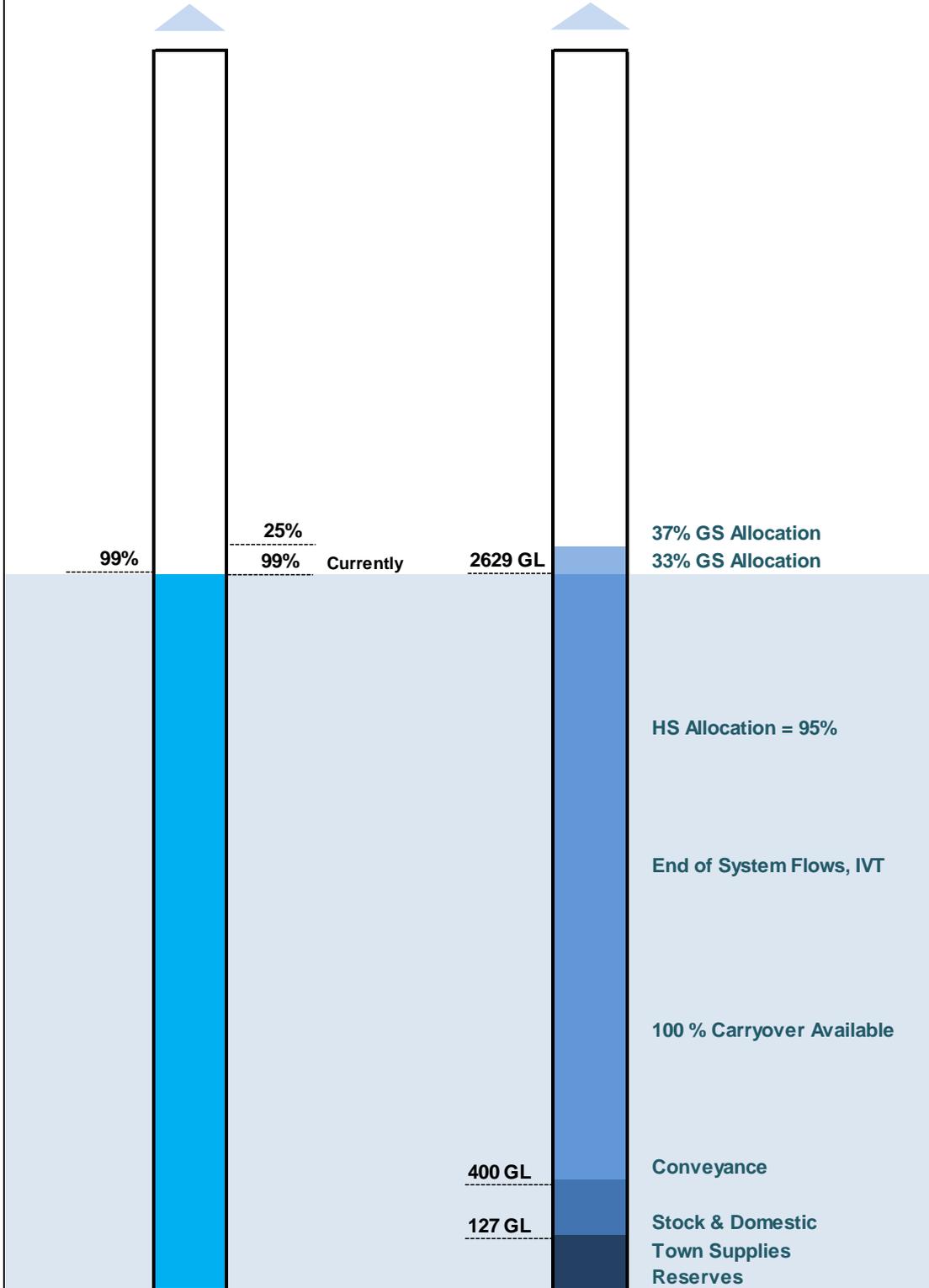
As at 15 November 2017

Probability of improvement

1-Dec

1-Feb

Indicative requirements



* The figure is based on probabilities and does not guarantee allocations, volumes are indicative only.