

2 October 2018

Murrumbidgee Valley

Water allocation update

There has been **no increase in allocations in the Murrumbidgee regulated river system**. In absence of significant rainfall, there was no resource improvement in the last fortnight.

The Murrumbidgee system has experienced extremely dry conditions in the last six months, among the lowest five percent on record.

In response to water user requests, additional information has been provided below on the distribution of the Murrumbidgee general security carryover.

	High Security	General Security	Average Carryover
Murrumbidgee	95%	7%	22%

Storage levels (as at 28 September 2018)

- Blowering Dam is 68 per cent full – decreasing – holding 1,114,000 megalitres (ML).
- Burrinjuck Dam is 42 per cent full – steady – holding 432,000 ML.

Climatic outlook

The Bureau of Meteorology seasonal outlook (October to December) indicates conditions over the Murrumbidgee catchment are likely to be dry, particularly in October, with above average temperatures.

The El Niño-Southern Oscillation (ENSO) remains neutral, though models suggest that El Niño conditions may develop this year. The Indian Ocean Dipole (IOD) has crossed into positive territory; however, it must remain positive for several weeks before a positive IOD event is considered established. A positive IOD and El Niño during spring typically means below average rainfall for southern, eastern and central Australia.

Trade

Water allocation can currently be traded **within** and **out** of the Murrumbidgee Valley, but trade **into** the Murrumbidgee Valley is closed. Water users are encouraged to monitor the WaterNSW website (www.waternsw.com.au) for information about the Murrumbidgee inter-valley trade (IVT) account balance and status of trade.

Next announcement

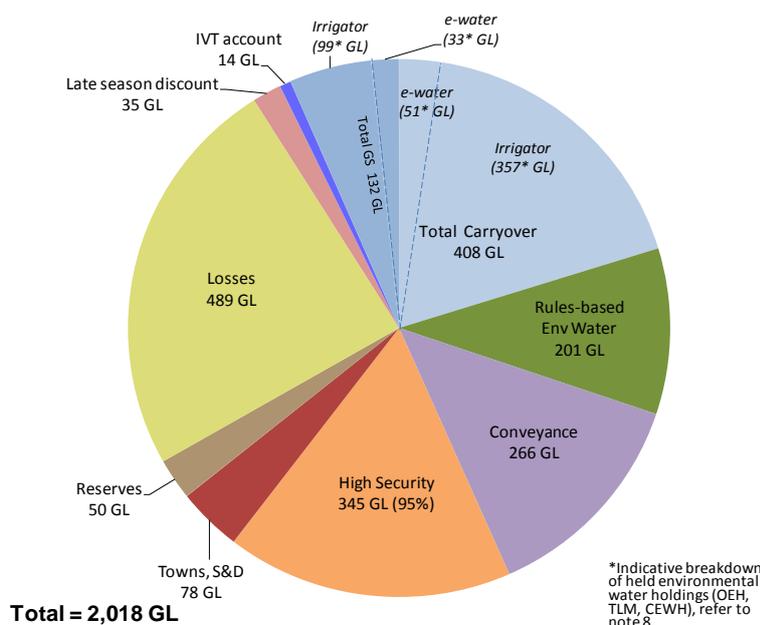
The next water allocation statement for the regulated Murrumbidgee Valley will be issued on **Monday 15 October 2018**. Forecast improvements under various inflow scenarios, including the rocket diagram, will be included in this next water allocation statement.

Murrumbidgee Resource Assessment Data Sheet

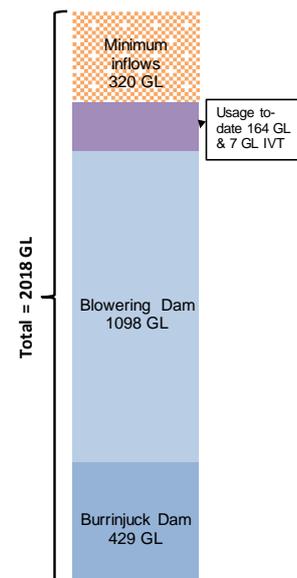
Resource Distribution 2018-19 (at 2 October 2018)	
	Volume (GL)
Total Available Resource ⁽¹⁾	2,018
less	
Carryover (GS and Conveyance)	408
Rules based Environmental Water ⁽²⁾	201
Towns, Stock, Domestic	78 (100%)
Reserves ⁽³⁾	50
Conveyance ⁽⁴⁾	266
Announced High Security	345 (95%)
Losses (transmission, evaporation, operational) ⁽⁵⁾	489
Murrumbidgee IVT account (carryover as of 1 July) ⁽⁶⁾	14
Late Season Inflows ⁽⁷⁾	35
Announced General Security	132 (7%)

*See notes below.

Resource Distribution 2018-19 – 2 October 2018



Supply Distribution⁽⁹⁾



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 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 (2018-19) to date is 692GL, and 200GL of flex release was pre-released in 2017-18.
- 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 120GL) and environmental water allowances (EWA1 = 50GL, EWA2 = 31GL, EWA3 = nil). 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 25GL per dam as an operational reserve, and Provisional Storage Volumes (PSV1 = nil, 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. (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) IVT account – this represents the carryover value into 2018/19. As the account status was negative, meaning Murray water is 'owed' to the Murrumbidgee that cannot be delivered, this volume of 14GL must be set aside from allocation in the Murrumbidgee. The current IVT balance is around minus 7 GL, meaning around 7 GL has been traded out of Murrumbidgee valley,.
- 7) Late Season Inflows – 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 delivery and use before it is captured in storage.
- 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 33GL of GS, 12GL of HS, 37GL of conveyance allocation and 51GL 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 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 (excludes early release volumes of next year's Snowy Hydro commitments), indicative usage to-date (may be estimates prior to reconciliation with hydrographic updates), IVT out of the valley and assumed minimum future inflows (includes Snowy Hydro's guaranteed inflows for the water year, and late season inflows). Towards the latter half of the water year, it will also include any estimated shortfall in meeting the following next year's high priority needs.

Carryover distribution Murrumbidgee:

While 408 GL of carryover in the Murrumbidgee is equivalent to 22 per cent general security entitlement, the choice to carryover is an individual licence holder decision. In the Murrumbidgee Valley about 10 per cent of licence holders carried over less than 5 per cent of entitlement, and about 60 per cent of licence holders carried over more than 20 per cent of entitlement.

The table below provides information on the distribution of carryover volumes across licences in the valley, sub-divided between licence size and between environmental and consumptive purposes. The distribution shows that the largest volume of carryover is held on

the largest two per cent of licences, which also represent most of the general security entitlement within the valley.

About 80 per cent of the valley's entitlement is held on the largest 19 licences, and these licences hold around 80 per cent of the carryover volume.

Murrumbidgee Carryover distribution

Share Components	Number of licences	Share Component (GL)	Total Carryover (GL)	Environmental Carryover (GL)	Consumptive Carryover (GL)
Small licences (<0.5 GL)	645	53	11	0	11
Medium licences (>0.5GL to about 6 GL)	181	266	59	0	59
Largest licences (> about 6 GL)	18	1496	328	49	279
TOTAL	845	1815	398	49	349

Note: Excludes conveyance carryover volumes (about 10GL total), and excludes Snowy Savings licences, which represents 75GL of entitlement.