

15 March 2018

## Murrumbidgee Valley

### Water allocation update and outlook

#### Allocations

Murrumbidgee general security allocation has **increased by 4 per cent, bringing the total this year (2017-18) to 38 per cent of entitlement.** All high priority commitments on 1 July, including carryover, are assured, however; at this early stage, general security entitlements will probably commence the new water (1 July 2018) year with zero or low allocation.

Rainfall at the end of February, together with reduced delivery losses contributed towards this improvement in resource availability.

	High Security	General Security	Average Carryover
Murrumbidgee	95%	38%	27%

#### Storage levels (as at 14 March 2018)

- Blowering Dam is 38 per cent full – steady – holding 651,000 ML.
- Burrinjuck Dam is 43 per cent full – falling – holding 445,000 ML.

#### Climatic outlook

The Bureau of Meteorology's seasonal outlook issued on 28 February 2018 indicates that over March to May, drier than average conditions are likely in the western parts of the valley. Daytime temperatures are expected to be above average for the valley over the three months. The Bureau has indicated its outlook is due for update on 15 March 2018.

The El Niño–Southern Oscillation (ENSO) outlook has shifted from La Niña to inactive, indicating the 2017-18 La Niña has ended. The ENSO indicators have eased back to neutral levels over the past several weeks. The Bureau advises that a neutral ENSO pattern indicates a reduced chance of prolonged very wet or dry, or very hot or cold conditions, and that other climate drivers may have greater influence over the coming months.

#### Trade

Trade **out** and **within** the Murrumbidgee Valley is open, but trade **into** the valley is closed. Water users are encouraged to monitor the WaterNSW website ([www.waternsw.com.au](http://www.waternsw.com.au)) for information about the Murrumbidgee inter-valley trade (IVT) account balance and status of trade.

#### Next announcements

At this time of the water year, past the peak irrigation season, Water Allocation Statements will continue on a monthly basis, with the next statement issued on **Monday 16 April 2018.**

If there are any substantial weather systems or water availability changes between scheduled announcements, then interim assessments and statements will be provided.

Water availability for the start of next water year (1 July 2018) is reported in this Statement and will continue to be updated on a monthly basis until mid-May as the new water year approaches.

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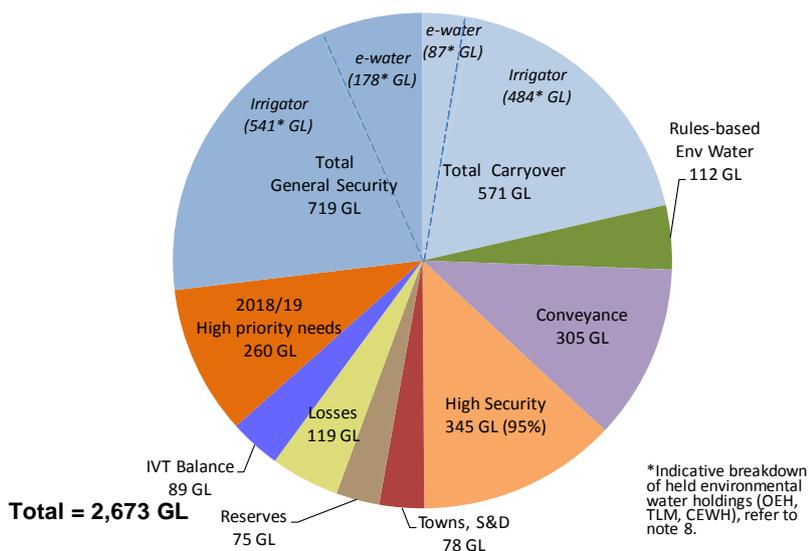
[www.water.nsw.gov.au](http://www.water.nsw.gov.au)

### Murrumbidgee Resource Assessment Data Sheet

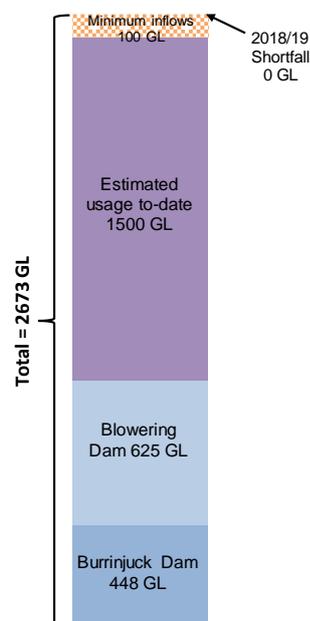
Resource Distribution (15 March) for 2017-18	
	Volume (GL)
Total Available Resource <sup>(1)</sup>	2,673
<b>less</b>	
Carryover (GS and Conveyance)	571
Rules based Environmental Water <sup>(2)</sup>	112
Towns, Stock, Domestic	78 (100%)
Reserves <sup>(3)</sup>	75
Conveyance <sup>(4)</sup>	305
Announced High Security	345 (95%)
Losses (transmission, evaporation, operational) <sup>(5)</sup>	119
Murrumbidgee IVT balance carryover at 1 July 2017	89
Late Season Discount <sup>(6)</sup>	0
Announced General Security	719 (38%)
Future (2018/19) high priority needs <sup>(7)</sup>	260

\*See notes below.

### Resource Distribution 2017-18 Murrumbidgee Valley - 15 March 2018



### Supply Distribution<sup>(9)</sup>



## 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 688 GL from 1 May 2017 to 12 March 2018.
- 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 36GL) and environmental water allowances (EWA1 = 50GL, EWA2 = 26GL, 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 = 25GL, 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) 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) Future high priority needs – at this time of year, we look ahead to next water year (2018/19) to ensure there is sufficient resource set aside to meet high priority needs on 1 July 2018. The required volume to meet these commitments is currently 260GL. This value may change from month to month based on the projected historical inflow sequence used in the assessment and accounting for actual delivery losses incurred during the month.
- 8) Held environmental water (HEW) – as a trial, reporting of held environmental water administered by environmental water holders is being 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 178GL of GS, 12GL of HS, 42GL 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.
- 9) Supply Distribution – as a trial, the distribution of supply is being provided. This 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). At this time of year, it also indicates any existing shortfall in meeting next year's (2018/19) high priority needs (refer to note 7).

## Preliminary water availability outlook for 2018-19

### Key information

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- This preliminary outlook for the likely 1 July 2018 water allocation is conservatively based on assumed extreme dry (99%) inflows for the remainder of the current 2017/18 water year. Indicative estimates for September and November 2018 allocations under a range of possible inflow scenarios are provided to assist water users to plan ahead.
- For context, the Murrumbidgee Valley has experienced 'very dry' (85<sup>th</sup> percentile) July to February inflows this year, which are the lowest inflows since the Millennium drought ended in 2010. For the period January to February, 65<sup>th</sup> percentile conditions have been experienced.
- In the Murrumbidgee water source, general security and conveyance licences can carry over water up to a maximum of 30 per cent of entitlement, and the account limit (allocation plus carryover) is 100 per cent of entitlement.
- It is difficult to reliably predict end-of-year carryover, as it is highly dependent on weather conditions over the next few months and individual decisions by water users. At this early stage estimates suggest carryover will be around 16 per cent of entitlement or around 302,000 megalitres (ML), which is much lower than last year.

- Access to inter-valley trade in 2018-19 is dependent on the balance of the IVT account. The 30 June balance will carry forward unchanged to 1 July 2018.
- Once the commencing allocations are announced on 1 July 2018, regular assessments will be undertaken and allocation announcements made fortnightly on the 1st and 15th of each month, or the next working day following, until full allocations are achieved.
- This preliminary forecast of water availability for 2018-19 will be updated in the monthly water allocation statements.

### Indicative allocations on 1 July 2018

- Full allocation can be expected for all towns, as well as domestic and stock access licences.
- Private carryover will be fully deliverable. At this early stage, it is estimated that the average carryover across the valley will be close to 16 per cent of entitlement.
- Murrumbidgee High Security access licences will receive an initial allocation of 95 per cent of entitlement, consistent with the Murrumbidgee regulated river water sharing plan.
- Under 'extreme dry' inflow conditions (99<sup>th</sup> percentile) through to the end of this (2017-18) water year, there will be zero (0) per cent commencing general security allocation on 1 July 2018.
- Water will be allocated to conveyance licences, commensurate with the opening general security allocation.
- Supplementary (including Lowbidgee) access licence holders will receive a full allocation; however diversion is only allowed during periods of announced supplementary access.
- Water in Environmental Water Allowances (EWA) accounts will be available in accordance with the rules of the water sharing plan.
- Murrumbidgee inter and intra valley trade will operate in accordance with existing procedures and protocols, particularly in relation to the inter-valley trade (IVT) account limits.
- Releases from headwater storages will be managed to maximise water availability and deliverability including equalising the risk of spill.

### Chances of improvement

The chances of improved general security allocation in the NSW Murrumbidgee after 1 July 2018, based on different inflow conditions, are provided in the following table.

### Forecast General Security allocation (per cent)<sup>#</sup>

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

Potential Inflow Conditions	1 Sept 2018	1 Nov 2018
99 chances in 100 (extreme) (99%) <sup>*</sup>	0	0
9 chances in 10 (very dry) (90%) <sup>^, **</sup>	7	17
3 chances in 4 (dry) (75%) <sup>**</sup>	15	32
1 chance in 2 (mean) (50%) <sup>**</sup>	22	44

<sup>#</sup> Storage behaviour modelling using all years and general security carryover of 16%.

<sup>^</sup> Currently tracking in 2017/18 in this (very dry) vicinity (about 85<sup>th</sup> percentile).

<sup>\*</sup> The extreme dry (99%) inflow conditions assumes 99% through the remainder of 2017/18, and through 2018/19.

<sup>\*\*</sup> Wetter scenarios assume dry (75%) inflows to 30 June, then the respective inflow scenario for 2018-19.