

15 February 2019

## Murrumbidgee Valley

### Water allocation update

Current allocations in the Murrumbidgee regulated river water source remain unchanged.

Some intermittent rainfall and very high temperatures have been experienced in the Murrumbidgee catchment areas since the last assessment. Inflows into the storages, inflows from downstream tributaries and updated water use information (hydrographic update) have combined to provide about 50,000 megalitres (ML) of resource improvement.

However, since the last assessment, Snowy Hydro's assessment of potential reduced inflow conditions across the scheme for 2019-20 shows a significant initial reduction in the previously assumed water available from the Required Annual Release (RAR) for 2019-20.

This latest resource improvement, and a further 150,000 ML, must therefore be set aside to meet 1 July 2019 (2019-20) high priority commitments before water can be allocated to general security entitlements.

Total Murrumbidgee system inflows excluding Snowy Hydro's releases over the last eight months of this water year (July to February) have been tracking in the lowest four per cent of historical record. Similarly, the Snowy Scheme has also experienced very dry conditions, receiving inflows in the lowest nine percent of record.

A preliminary outlook for 2019-20 opening allocations has been provided further below.

2018-19	High Security	General Security	Average Carryover	Drought Stage
Murrumbidgee	95%	7%	22%	 Stage 1

### Storage levels (as at 14 February 2019)

- Blowering Dam is 29 per cent full – falling – holding 496,000 ML.
- Burrinjuck Dam is 35 per cent full – falling – holding 360,000 ML.

### Climatic outlook

The Bureau of Meteorology seasonal outlook for March to May shows no clear indication of drier or wetter conditions. Temperatures are likely to continue above average.

The Bureau's El Niño-Southern Oscillation (ENSO) Outlook has changed to El Niño WATCH, with recent observations and models suggesting that the immediate risk of El Niño, and therefore drier conditions, has passed. Although main climate drivers remain neutral, there remains about a 50 per cent chance of El Niño developing in autumn or winter.

For further details: [www.bom.gov.au/climate/outlooks/#/overview/summary](http://www.bom.gov.au/climate/outlooks/#/overview/summary)

## Drought stage

The NSW extreme events policy introduces a staged approach to managing extreme events such as severe droughts or poor water quality events. Currently, the Murrumbidgee Valley is in Stage 1, meaning it can deliver all account water under normal regulated river operations.

Further information on the policy and related drought stages can be found at:  
<https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events>

## Trade

Water allocation can currently be traded **within** and **out** of the Murrumbidgee Valley, but trade **into** the Murrumbidgee Valley remains closed. Water users should monitor the WaterNSW website ([www.watnsw.com.au](http://www.watnsw.com.au)) for information about the Murrumbidgee inter-valley trade (IVT) account balance and the status of trade.

## Next announcement

The next allocation update for the Murrumbidgee regulated river valley will be issued on **Friday 1 March 2019**.

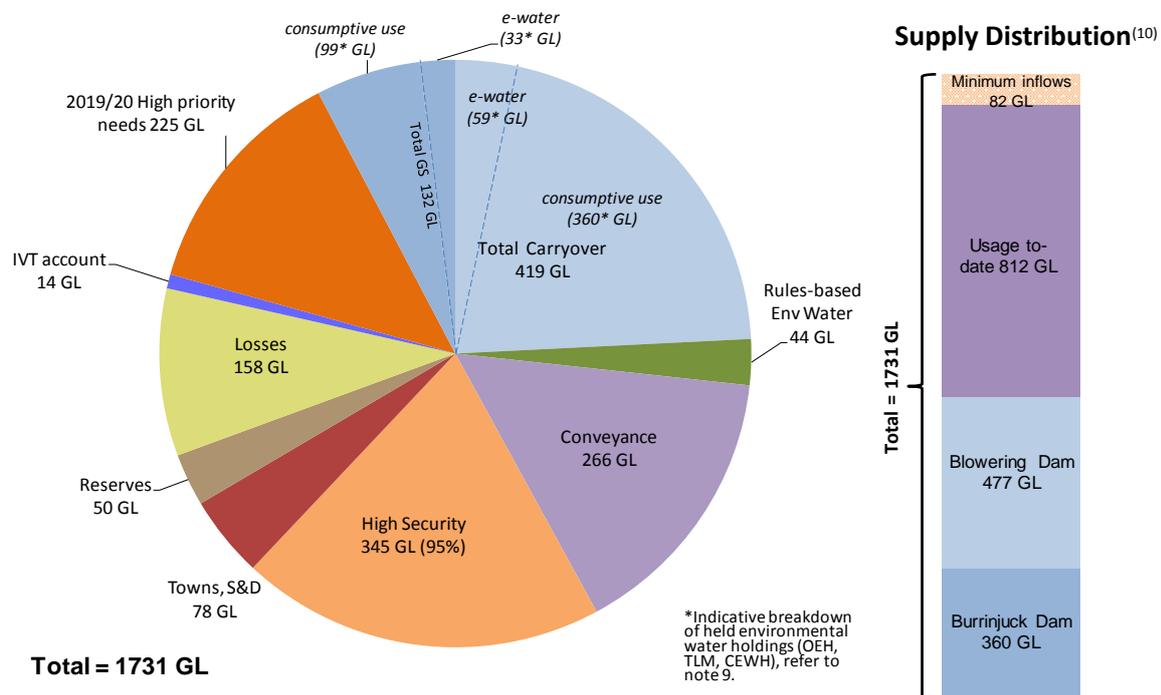
Mid-month statements will continue to provide indicative 1 July 2019 allocations as the new water year approaches. This aims to help water users with their end of year water management decisions – whether to use, trade or carryover their account balances. However, forecast conditions are best estimates only and not guaranteed water availability. They should be used with caution, particularly when they project many months ahead.

## Murrumbidgee resource assessment data sheet

<b>Resource Distribution 2018-19 (at 15 February 2019)</b>	
	Volume (GL)
Total Available Resource <sup>(1)</sup>	1,731
<b>less</b>	
Carryover (GS and Conveyance)	419
Rules based Environmental Water <sup>(2)</sup>	44
Towns, Stock, Domestic	78 (100%)
Reserves <sup>(3)</sup>	50
Conveyance <sup>(4)</sup>	266
Announced High Security	345 (95%)
Losses (transmission, evaporation, operational) <sup>(5)</sup>	158
Murrumbidgee IVT account (carryover as of 1 July) <sup>(6)</sup>	14
Late Season Inflows <sup>(7)</sup>	0
Announced General Security	132 (7%)
Future (2019-20) high priority needs <sup>(8)</sup>	225

\*See notes below.

## Murrumbidgee resource distribution 2018-19 – 15 February 2019



### 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 estimated to be about 730GL, 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 43GL) and environmental water allowances (EWA1 = 1GL, EWA2 = nil, 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 on 1 July 2018, meaning Murray water was 'owed' to the Murrumbidgee that could not be delivered, this volume of 14GL was set aside from allocation in the Murrumbidgee. The impact on all Murrumbidgee water users of a negative IVT balance is resolved by those who trade **out** of the valley during the water year, thereby lifting the IVT balance. There is currently a negligible negative balance (- 0.1 GL).
- 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) Future high priority needs – it is required to look ahead to next water year (2019-20) to ensure there is sufficient resource available to meet high priority commitments on 1 July. This volume is currently estimated to be about 375GL of which 225 GL has been met. This value changes from month to month based on the complex interaction of climatic factors, projected historical inflow sequence, usage/potential carryover, and actual transmission and operational losses as the water year unfolds.

- 9) 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 and 8GL conveyance 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.
- 10) 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) and assumed minimum future inflows (includes Snowy Hydro's guaranteed inflows for the water year, and late season inflows).

## Preliminary water availability outlook for 2019-20

### Key information

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- This preliminary outlook for 1 July 2019 Murrumbidgee water availability is conservatively based on assumed extreme dry (99<sup>th</sup> percentile) inflow conditions for the remainder of this water year, and all of 2019-20.
- For context, the Murrumbidgee valley has experienced between 'very dry' and 'extreme dry' (96<sup>th</sup> percentile) July to February inflows this year. Only four out of 100 years in the historical record have experienced drier conditions.
- This forecast information is not guaranteed and should be used at one's own risk. It will be updated in the mid-monthly water allocation statements and can expect to become more reliable as the forecast period reduces.
- Although extreme dry conditions are assumed to continue, heavy rainfall and significant inflows can occur at any time, and allocations will be promptly adjusted accordingly.
- 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 five per cent of entitlement or around 100,000 megalitres (ML), which is much lower than last year.
- Access to inter-valley trade in 2019-20 is dependent on the balance of the IVT account. The 30 June balance will carry forward unchanged to 1 July 2019.
- BoM's rainfall forecast indicates a roughly equal chance of wetter or drier conditions over the next three months from February to April.
- Once the commencing allocations are announced on 1 July 2019, regular assessments will be undertaken and allocation announcements made fortnightly on the 1st and 15th of each month, or next working day following, until full allocations are achieved.

### Indicative allocations on 1 July 2019

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- Full (100 per cent) allocation can be expected for towns, domestic and stock access licences, and sub-category high security entitlements.

- Supplementary (including Lowbidgee) access licence holders will receive a full allocation; however diversion is only allowed during periods of announced supplementary access.
- Private carryover will be fully deliverable. At this early stage, it is estimated that the average carryover across the valley will be close to five 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.
- For 1 July, some reduced allocation to conveyance entitlements is possible in the unlikely event that a shortfall emerges from extreme dry conditions. Conditions are being closely monitored and updates will be provided.
- There will be no commencing general security allocation for 2019-20 under extreme dry inflow conditions.
- Revised outlooks will be provided monthly, and should become more reliable as the forecast period reduces.
- Water in Environmental Water Allowances (EWA) accounts will be available and accrue in accordance with the rules of the water sharing plan.
- Murrumbidgee inter and intra valley trade will operate in accordance with existing procedures, 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 from headwater storages.