

15 May 2020

Murrumbidgee Valley

Water allocation update

Allocations to **general security have increased by 5 per cent** in the Murrumbidgee regulated river water source, with cumulative allocations for 2019/20 to general security licences now totalling 11 per cent of entitlement. Murrumbidgee general security water availability (allocation plus carryover) has now reached on average 19 per cent of entitlement. There has been a commensurate increase in Conveyance allocations in accordance with the water sharing plan.

Rainfall in late April has resulted in a boost to resources in the Murrumbidgee valley, including helpful improvements in Murrumbidgee storages and the Snowy Scheme in recent weeks.

Next year's high priority commitments, to be announced on 1 July, are now assured, assuming at least minimum inflows in June, including commensurate opening allocations to Conveyance entitlements and full access to carryover.

This statement provides an updated outlook for the 2020/21 water year further below.

2019/ 20	High Security	General Security	Average Carryover	Drought Stage
Murrumbidgee	95%	11%	8%	 Stage 1

Drought stage

The **Murrumbidgee Valley** regulated river water source is in Stage 1 drought criticality, meaning all allocated water can be delivered under normal regulated river operations. However, despite some promising signs, drought recovery will take some time, therefore the resource situation is being monitored closely to ensure high priority needs can remain secure through 2020/21 and beyond. 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 13 May 2020)

- Blowering Dam is 49 per cent full – steady – holding 813,000 megalitres (ML).
- Burrinjuck Dam is 41 per cent full – steady – holding 419,000 ML.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for June to August indicates that conditions are likely to be wetter than average across the catchment. Temperatures are likely to be average to warmer than average.

The Bureau indicates that the El Niño-Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) are neutral. Negative IOD and La Niña conditions may develop over winter and spring.

For further details: www.bom.gov.au/climate/outlooks/#/overview/summary

Trade

Trade **out and into** the Murrumbidgee valley is **open** (as of 14 April 2020) with a small IVT balance of 0.9 GL. Water users should monitor the WaterNSW website (www.waternsw.com.au) for daily information about the IVT account balance, status of trade and seasonal trade closures.

Next announcement

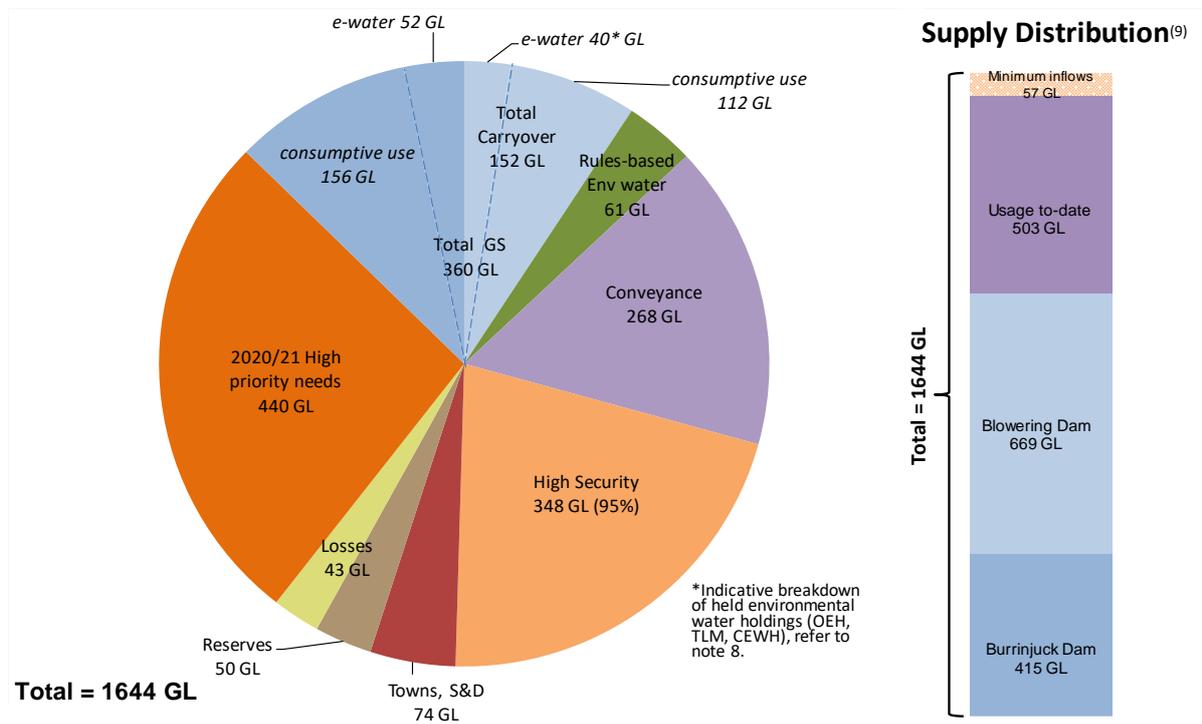
This is the final water allocation statement for the 2019/20 water year. Opening water allocations will be made on **Wednesday 1 July 2020**. Regular fortnightly statements for the 2020/21 water year will commence on Wednesday 15 July 2020.

Murrumbidgee resource assessment data sheet

Resource Distribution (15 May) for 2019-20	Volume (GL)
Total Available Resource ⁽¹⁾	1,644
less	
Carryover (GS and Conveyance) ⁽⁸⁾	152
Rules based Environmental Water ⁽²⁾	61
Towns, Stock, Domestic	74 (100%)
Reserves ⁽³⁾	50
Conveyance ⁽⁴⁾	268
Announced High Security	348 (95%)
Losses (transmission, evaporation, operational) ⁽⁵⁾	43
Late Season Inflows ⁽⁶⁾	0
Announced General Security ⁽⁸⁾	208 (11%)
Future (2020-21) high priority needs ⁽⁷⁾	440

**See notes below.*

Murrumbidgee resource distribution 2019-20 – 15 May 2020



Data sheet notes

- 1) Total available resource – total active storage volume (Blowering & Burrinjuck Dams, excluding any Snowy flex) 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 (2019-20) is estimated to be about 880GL (includes montane release).
- 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 21 GL) and environmental water allowances (EWA1 = 0 GL, EWA2 = 40 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 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. Conveyance licences in the Murrumbidgee valley can also carryover 30% of their 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 updated monthly.
- 6) 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, as it can create an expectation that the water is available for delivery before it is captured in storage.
- 7) Future high priority needs – it is required to look ahead to next water year (2020/21) to ensure there is enough resource available to meet high priority commitments on 1 July 2020. This volume is estimated to be about 440 GL. This value changes from month to month based on the complex interaction of supply including Snowy Hydro Required Annual Releases forecast, usage/potential carryover, and actual transmission and operational losses as the water year unfolds.
- 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 52 GL of GS, 15 GL of HS, 59 GL of conveyance allocation and 40 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).

Outlook for 2020/21

Key information

- This outlook for 1 July 2020 water allocations is conservatively based on assumed extreme dry (99%) inflows for the remainder of this water year and similarly through 2020/21. Actual inflow conditions better than these will improve water availability and be allocated. Indicative forecast General Security allocations for September and November 2020 under a range of possible inflow scenarios are provided to assist water users to manage risk and plan.
- For context, the Murrumbidgee valley has averaged about 95th percentile conditions this water year, that is, only five years out of a given 100 years of historical record experience drier conditions.
- The forecast information is not guaranteed and should be used at one's own risk.
- Current accounts data, including the general security allocations in the current assessment, indicates that carryover will be around 18 per cent on average. Maximum general security carryover in the valley is 30 per cent of entitlement. Late trade and usage may vary this figure and the actual carryover volume will be likely be finalised by late July 2020.
- 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.
- Access to inter-valley trade in 2020/21 is dependent on the balance of the IVT account. The 30 June 2020 balance will carry forward unchanged to 1 July 2020.
- This is the last outlook for 2020/21 before commencing allocations are announced on 1 July 2020. Once the commencing allocations are announced on 1 July 2020, 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 2020

- 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 can expect to receive a full allocation, which is available subject to announced periods of supplementary flows and access.
- It is forecast at this stage that **high security** allocation should receive 95 per cent of entitlement in accordance with the water sharing plan, and opening **conveyance** allocation and **carryover** commitments will also be met on 1 July 2020.
- **General security** allocations are likely to start at low or zero per cent of entitlement if very dry conditions eventuate.
- From resource improvements in 2020/21, allocations will be made to **general security licences**, particularly early in the water year, and reserves for high priority commitments in 2021/22 will also need to be built during the year from resource improvements.
- Water can be expected to be set aside for environmental requirements in accordance with the rules of the Murrumbidgee regulated rivers water sharing plan.

Chances of improvement

The chances of improved general security allocations after 1 July 2020, 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 variability, water user behaviour and other events. This means that water users should use this information with caution and at their own risk, as it projects many months ahead.

Forecast general security allocations (per cent)

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

Repeat of historical inflow conditions	1 Sept 2020	1 Nov 2020
99 chances in 100 (extreme) (99%)*	0%	0%
9 chances in 10 (very dry) (90%)**	8%	10%
3 chances in 4 (dry) (75%)**	17%	30%
1 chance in 2 (mean) (50%)**	37%	60%

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%.

* The extreme dry (99%) inflow conditions assumes 99% through the remainder of 2019/20, and through 2020/21, with the design drought restarting on 1 July 2020.

** Scenarios assume dry (75%) inflows for the remainder of the current year, followed by the respective inflow scenario design drought for 2020/21.

Drought Information Webinar

The department, together with WaterNSW, will be holding public information sessions on drought outlook and water availability via webinar during May and June 2020. For more information go to:

<https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/information-sessions>

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