

17 July 2017

NSW Murray and Lower Darling

Water allocation update

Allocations

NSW Murray general security allocation has **increased by 2 per cent**. It is now 13 per cent of entitlement for the 2017/18 water year. This small improvement is from the settlement of end of year trade and water usage data rather than from improved inflows. June was very dry with Murray inflows likely to be exceeded 94 in 100 years (94% Annual Exceedance Probability).

This assessment is based on an average carryover of about 42 per cent, meaning that overall general security water availability is 55 per cent of entitlement. A final carryover volume will be available at the end of July, though no great change is expected.

	High Security	General Security	Average Carryover
Murray	97%	13%	42%^
Lower Darling	100%	100%	n/a

^ Estimated, as account processing has not been finalised.

Upper Murray storage levels (as at 14 July 2017)

- Dartmouth Dam is currently about 78 per cent full, holding 3,026,000 megalitres (ML).
- Hume Dam is 73 per cent full, holding 2,199,000 ML.

Climatic outlook

The Bureau of Meteorology seasonal outlook indicates that below average rainfall conditions over much of the Murray valley are likely from July to September, with above average temperatures.

Atmospheric and oceanic indicators used to measure the El Niño–Southern Oscillation (ENSO) remain within neutral bounds, and similarly, the Indian Ocean Dipole (IOD) remains neutral. Therefore the Bureau's ENSO Outlook is currently INACTIVE, with neither El Niño nor La Niña expected to influence Australia's climate this year.

Trade

In the Murray, trade across the Barmah choke remains restricted to 'no net trade downstream'. Downstream trade opens automatically to the extent of the volume of any upstream trade.

The trade restriction protects existing downstream entitlement holders from the risk of delivery shortfall caused by the limited physical capacity of the Barmah choke.

Water users are encouraged to monitor the MDBA website at <http://www.mdba.gov.au/managing-water/water-markets-trade/interstate-water-trade/barmah-choke-trade-balance> for information about the trade balance and status of trade.

Lower Darling water source trade is open, including inter-valley trade.

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

Next announcements

The next allocation update for the NSW Murray and Lower Darling valleys will be on **Tuesday 1 August 2017**.

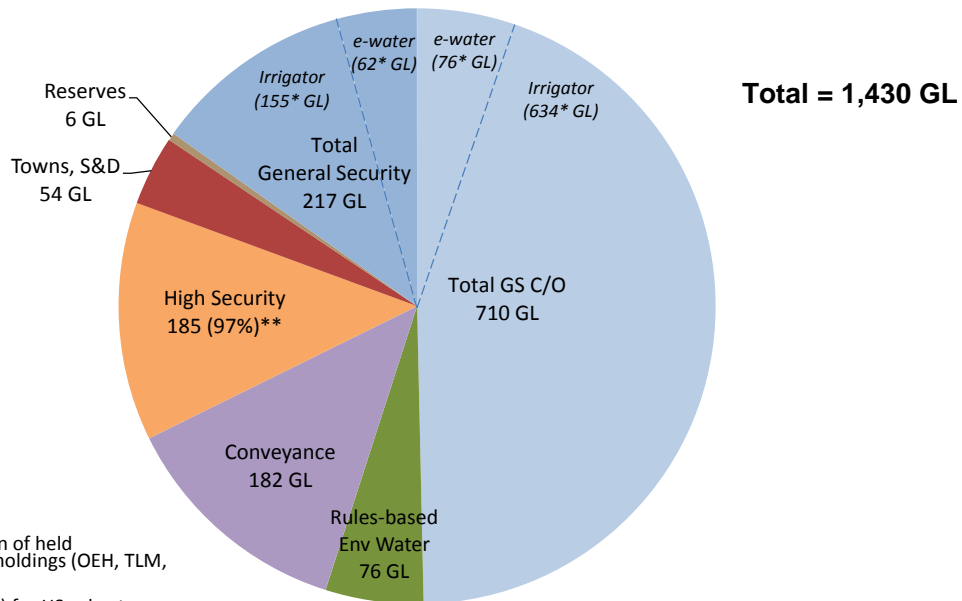
An updated probability analysis showing likely improvement in water availability under different inflow scenarios, including the rocket diagram, will be issued again on Tuesday 15 August 2017.

NSW Murray Resource Assessment Data Sheet

Resource Distribution (as at 17 July) for 2017-18	Volume (GL)
Total Available Resource ⁽¹⁾	1,430
less	
Carryover ^{(2), (7)}	710
Rules based Environmental Water ⁽³⁾	76
Towns, Stock, Domestic ⁽⁴⁾	54 (100%)
Announced High Security subcategory (education, research) ⁽⁴⁾	1 (100%)
Announced High Security ⁽⁴⁾	184 (97%)
Conveyance ⁽⁵⁾	182
Reserves ⁽⁶⁾	6
Announced General Security ⁽⁷⁾	217 (13%)

*See notes below.

**Resource Distribution 2017-18
NSW Murray - 17 July 2017**



* indicative breakdown of held environmental water holdings (OEH, TLM, CEWH), refer to note.
 ** includes 1GL (100%) for HS subcategory (community & education, research).

Notes:

- (1) Total available resource - NSW's state share of active storage volume (Hume, Dartmouth, Menindee and Lake Victoria) as assessed and accounted for under the Murray-Darling Basin Agreement at the time of the assessment plus any usable flows in transit plus assumed drought inflows for the rest of the year plus Snowy Hydro's assured Required Annual Release (RAR) as well as estimated usage to date.
- (2) Carryover – NSW Murray general security water users can carryover a maximum account balance of 50 per cent of their entitlement into the following water year. The account limit is 110 per cent of entitlement, which can consist of both allocation and carryover. This carryover value remains an estimate until finalised by WaterNSW in late July.
- (3) Primarily rules-based planned environmental water – water required to be set aside under water sharing plans to provide for riverine environments. In the NSW Murray this includes Additional Environmental Allowance (AEA) (about 6 GL), Wakool system requirements (up to 70 GL), and the Barmah-Millewa Allowance (B-MA) (which is currently 100 per cent borrowed). Excludes 'licence-based' environmental water also known as held environmental water (HEW).
- (4) The *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016* has subcategories of high security licenses in the Murray Water Source. High security subcategory licences under *Part 7 Division 2 Clause 46(2)* that are present in the Murray include community and education, research, and town water supply. At the commencement of each water year, these licences are to receive 100% allocation, while remaining high security licences are to receive 97% allocation. For the purposes of this water allocation statement, the high security town water supply allocation volume has been grouped as "Towns, S&D".
- (5) 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 plan and is a function of current high and general security allocation.
- (6) Reserves – required primarily under statutory plans; set aside for emergency purposes and critical needs.
- (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 limited to only NSW entitlements, reporting of credits to accounts (not usage), and estimated to be 62 GL of GS, 24 GL of HS, 23 GL of conveyance allocation and a provisional value of 76 GL of GS carryover. These 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 holdings.

NSW Murray Resource Assessment – Comparison with this time last year

Item	Mid Jul 2016 (GL)	Mid Jul 2017 (GL)	Comments
NSW share of total resources	1,002	1430	Higher storage levels due to early delivery of Snowy water
less			
Carryover	440	710	Significantly higher carryover
Environmental	76	76	same
Towns, Stock, Domestic	54	54	same
Conveyance	170	182	similar
High Security	185	185	same
Critical Human Need (CHN) reserve*	10	6	similar
General Security	67	217	higher allocation in 2017

* CHN reserve target 61 GL.

Chances of improvement

The chances of inflows being above historical minimums, and therefore the likelihood of improved allocations, are as follows:

NSW MURRAY Potential Inflow Conditions[#]	Forecast 1 Sep 2017 General Security Allocations[^]	Forecast 1 Nov 2017 General Security Allocations[^]
Current allocation (99% inflows)	13%	17%
9 chances in 10 (very dry) (90%) ^{^^}	20%	30%*
3 chances in 4 (dry) (75%)	28%	36%**
1 chance in 2 (average) (50%)	30%*	60%**
1 chance in 4 (wet) (25%)	33%**	72%**

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

[#] Multi-history modelling using historical record (1892 – 2011).

* Commence pay-back of borrow from B-M Allowance. **Borrow from B-M account is fully repaid.

^{^^} Currently tracking around here

(The three month period from April to June 2017 (81% AEP), two month May to June 2017 (91%AEP), June 2017 (94% AEP)).

NSW Murray Valley Outlook

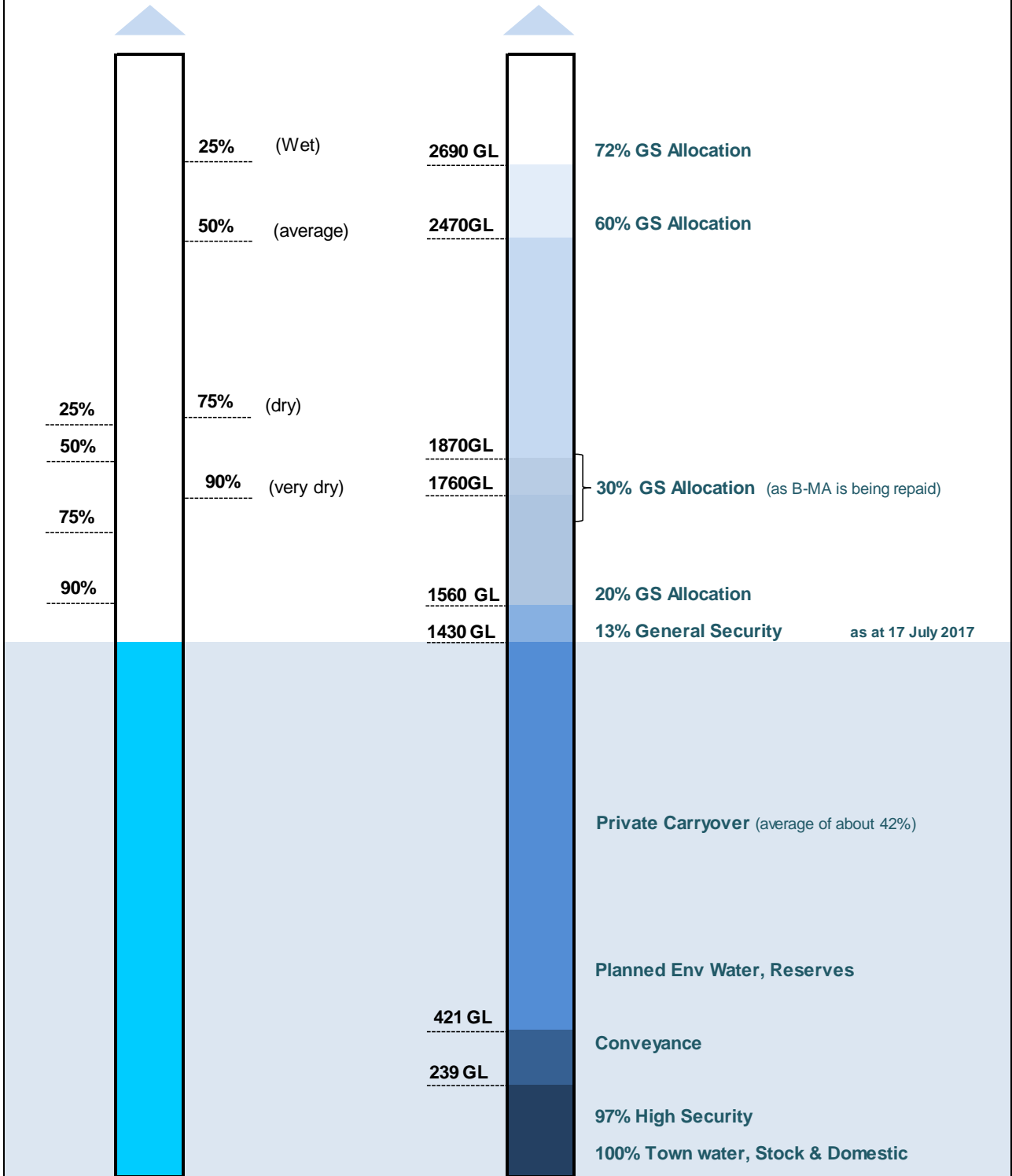
as at 17 July 2017

Probability of improvement

Indicative requirements

1-Sep

1-Nov



* The figure is based on probabilities and does not guarantee allocations, volumes are indicative only. Large volume items are listed in this figure to provide context, refer to Data Sheet table for complete listing of items contained within the Total Available Resource value.