

1 November 2018

## NSW Murray and Lower Darling

### Water allocation update

There has been a small improvement in NSW Murray regulated river resources which has been mostly allocated to the Conveyance licence category. **Allocations for all other entitlements remain unchanged.**

Dry conditions have continued throughout October, with rainfall to date being mostly below average in the region, tracking around the lowest ten per cent on record. Modest inflows have been driven mostly by small rainfall events and snowmelt from upper catchments slowing tributary recessions. This has resulted in a small resource improvement of about 20,000 megalitres (ML).

Of this increase in resource, 15,000 ML has been allocated to Conveyance licences and 5,000 ML has been set aside to offset likely impacts from transmission losses trending above budget.

**Allocations in the Lower Darling remain unchanged.** The Menindee Lakes system is at seven per cent of full supply capacity (holding about 128,000 megalitres) and is critically low. Of this volume, about 22,600 ML is stored in Lake Wetherell, 72,300 ML in Lake Pamamaroo and 10,600 ML in Copi Hollow. The remaining balance is inaccessible in Lake Cawndilla and Lake Tandure.

WaterNSW is currently filling two temporary block banks in the Lower Darling as part of drought contingency measures to extend access for high priority uses as long as possible. Two additional block banks between Menindee and Pooncarie are expected to be constructed in November and will be filled with remaining supplies from Lake Pamamaroo.

As block banks are filled, cease to flow conditions will begin to commence. At such time, restrictions on use will be put in place to limit extraction to highest priority uses including town water supply, domestic, stock, and permanent plantings.

Operational updates for the Lower Darling regarding water storage volumes and relevant drought measures can be found in WaterNSW's state-wide weekly water availability reports (<https://www.watnsw.com.au/supply/regional-nsw/availability>).

While updates on Lower Darling operational status, forecasts and planning can be found in their periodic water operations reports (<https://www.watnsw.com.au/supply/regional-nsw/operations>).

	High Security	General Security	Average Carryover
Murray	97%	0%	31%
Lower Darling	100%	0%	15%

## Murray storage levels (as at 31 October 2018)\*

- Dartmouth Dam is 80 per cent full – falling – holding 3,101,000 megalitres (ML).
- Hume Dam is 47 per cent full – falling – holding 1,424,000 ML.
- Lake Victoria is 67 per cent full – rising – holding 451,000 ML.

\* NSW share of this water is approximately 33%, 35% and 20% for these storages respectively.

## State sharing of the Murray resource

The monthly forecast accounts to the end of October indicate 5,400 GL of total Murray resource is available in the very dry (99 percentile) case, of which about 1,660 GL is needed to run the system and therefore 3,740 GL is distributed to NSW and Victoria based on rules in the Murray-Darling Basin Agreement.

The NSW share of this is about 1,230 GL from which commitments to South Australia's entitlement flow and trade adjustments are deducted to leave NSW with 1,010 GL of resource to distribute (99 percentile). This represents an increase of 20 GL from the last assessment.

## Climatic outlook

The Bureau of Meteorology seasonal outlook for November to January indicates that rainfall conditions are generally likely to be drier than average in the valley over this period, with November indicating high chances of being dry, while December shows no clear indications of drier or wetter than average conditions. Above average temperatures experienced so far in 2018 are likely to continue into early 2019.

The Bureau's El Niño-Southern Oscillation (ENSO) Outlook remains at El Niño ALERT, with El Niño likely to develop before the end of the year. Observations continue to indicate that a positive Indian Ocean Dipole (IOD) event is likely underway, though may dissipate through November. When combined, an El Niño and positive IOD event increase the chances of dry and warm conditions, particularly during spring.

## Trade

In the Murray, trade across the Barmah choke remains restricted to '**no net trade downstream**'. Downstream trade opens to the extent of the volume of any upstream trade. The trade restriction helps to protect existing downstream entitlement holders from an increased risk of delivery shortfall due to the limited physical capacity of the Barmah choke. Water users are encouraged to monitor the Murray-Darling Basin Authority (MDBA) website ([www.mdba.gov.au](http://www.mdba.gov.au)) for information about the trade balance and status of trade.

The Menindee Lakes system is below 480 GL, the threshold at which the Lower Darling becomes administratively separated from the Murray. Temporary trade with the Murray is therefore closed. Trade typically remains closed until the system recovers to above 640GL. Trade within the Lower Darling water source remains unaffected.

Trade **out** and **within** the Murrumbidgee Valley is open, but trade **into** the Murrumbidgee Valley is closed. Trade into the Murrumbidgee Valley will re-open when the Murrumbidgee inter-valley trade (IVT) account balance climbs to 15 GL. Water users are encouraged to

monitor the WaterNSW website ([www.waternsw.com.au](http://www.waternsw.com.au)) for daily information about the IVT account balance and status of trade.

## Next announcement

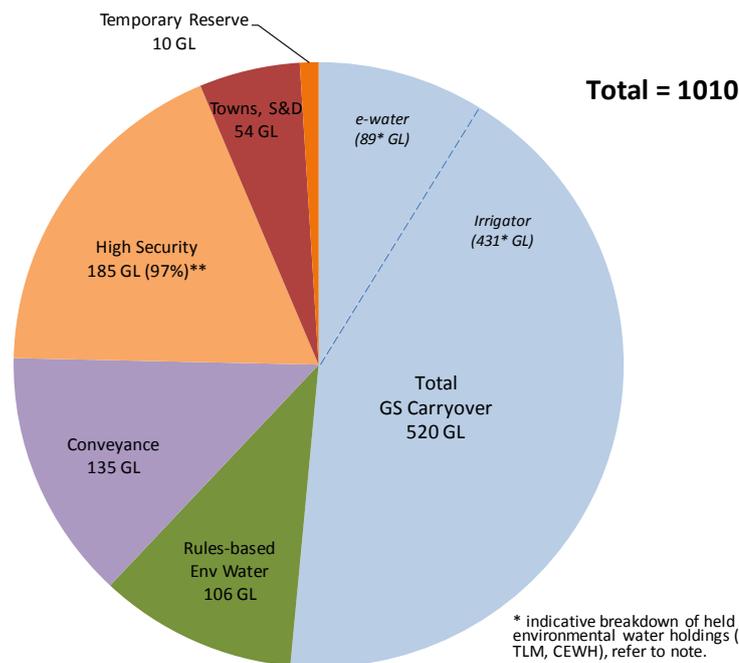
The next water allocation statement for the NSW Murray and Lower Darling valleys will be issued on **Thursday 15 November 2018**. Forecast improvements under various inflow scenarios, including the rocket diagram, will be included in this next water allocation statement.

## NSW Murray resource assessment data sheet

Resource Distribution (1 November) for 2018-19	Volume (GL)
Total Available Resource <sup>(1)</sup>	1,010
<b>less</b>	
Carryover <sup>(2), (7)</sup>	520
Rules based Environmental Water <sup>(3)</sup>	106
Towns, Stock, Domestic <sup>(4)</sup>	54 (100%)
Announced High Security subcategory (education, research) <sup>(4)</sup>	1 (100%)
Announced High Security <sup>(4)</sup>	184 (97%)
Conveyance <sup>(5)</sup>	135 (41%)
Reserves <sup>(6)</sup>	0
Announced General Security <sup>(7)</sup>	0 (0%)
Temporary Reserve <sup>(8)</sup>	10

*\*See notes below.*

## NSW Murray resource distribution 2018-19 – 1 November 2018



\* indicative breakdown of held environmental water holdings (OEH, TLM, CEWH), refer to note.

\*\* includes 1GL (100%) for HS subcategory (community & education,

## Data sheet 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 (99%ile) inflows for the 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 M1 releases to date for this water year (2018-19) is 610GL, and 200GL of flex was pre-released in 2017-18. NSW remains in Special Accounting with South Australia (SA), details of which can be found in the MDB Agreement clauses 123-129. Special accounting is triggered when NSW is forecast unable to meet the required reserve of 1,250 GL by the end of the water year to supply SA with its entitlement in the following year.
- (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, meaning that account credits from allocation and/or carryover cannot exceed 110% of entitlement in any water year. The limit does not include allocation trade.
- (3) Primarily rules-based planned environmental water – water required to be set aside to provide for riverine environments, as per water sharing plan and other interjurisdictional agreements. In the NSW Murray this includes the Murray Additional Allowance (MAA) (about 6 GL), Wakool system requirements (up to 70 GL, currently 40 GL available), and the Barmah-Millewa Allowance (B-MA) (about 249 GL – currently 100% borrowed). It also includes River Murray Increased Flows (RMIF) in Hume, accrued as part of the Snowy Water Initiative (currently 60 GL available out of a total commitment of about 90 GL). The total commitments to B-MA and RMIF will decrease over the water year as they are released from Hume for use. 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 licences 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) – 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 limited to only NSW entitlements, reporting of credits to accounts (not usage or trade), and estimated to be 0 GL of GS, 24 GL of HS, 21 GL of conveyance allocation and 89 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 environmental holdings can be found on individual agency websites.
- (8) Temporary reserve – small reserve introduced to buffer against elevated risk of high-than-budgeted losses.