

2 October 2018

NSW Murray and Lower Darling

Water allocation update and outlook

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

September rainfall to date has been mostly below average in the region. Some rainfall in the upper catchments, combined with snowmelt, has contributed to slowing tributary recessions, and a small resource improvement of 40GL.

Of this increase in resource, 30GL has been allocated to Conveyance licences and 10GL has been set aside to offset likely impacts from transmission losses trending above budget and the effects of Victoria leaving NSW in 'Special Accounting' in the next month or two.

Allocations in the Lower Darling remain unchanged. The Menindee Lakes system is at 9 per cent of full supply capacity (holding about 157,000 megalitres) and is critically low.

In response to water user requests, additional information has been provided below on the distribution of the NSW Murray general security carryover of some 520,000 megalitres.

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

Murray storage levels (as at 28 September 2018)*

- Dartmouth Dam is 86 per cent full – falling – currently at 3,316,000 megalitres (ML).
- Hume Dam is 52 per cent full – steady – currently at 1,563,000 megalitres (ML).
- Lake Victoria is 52 per cent full – rising slowly – currently at 355,000 megalitres (ML).

* NSW share of this water is approximately 36%, 36% and 34% for these storages respectively.

State sharing of Murray resource

The monthly accounts to 1 September indicate 5,590 GL of total Murray resource is available in the very dry (99 percentile) case, of which about 1,790 GL is needed to run the system and therefore 3,800 GL is distributed to NSW and Victoria based on rules in the Murray-Darling Basin Agreement.

The NSW share of this is about 1,270 GL from which commitments to South Australia's entitlement flow and trade adjustments are deducted to leave NSW with 1,030 GL of resource to distribute (99 percentile). This represents an increase of 40 GL from the last assessment.

Climatic outlook

The Bureau of Meteorology seasonal outlook for October to December indicates that conditions over the Murray catchment are likely to be dry, particularly in October, with well above average temperatures.

The El Niño-Southern Oscillation (ENSO) remains neutral, although models suggest that El Niño conditions may develop this year. The Indian Ocean Dipole (IOD) has crossed into positive territory; however, it must remain positive for several weeks before a positive IOD event is considered established. A positive IOD and El Niño during spring typically means below average rainfall for southern, eastern and central Australia.

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) 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.watersw.com.au) for daily information about the IVT account balance and status of trade.

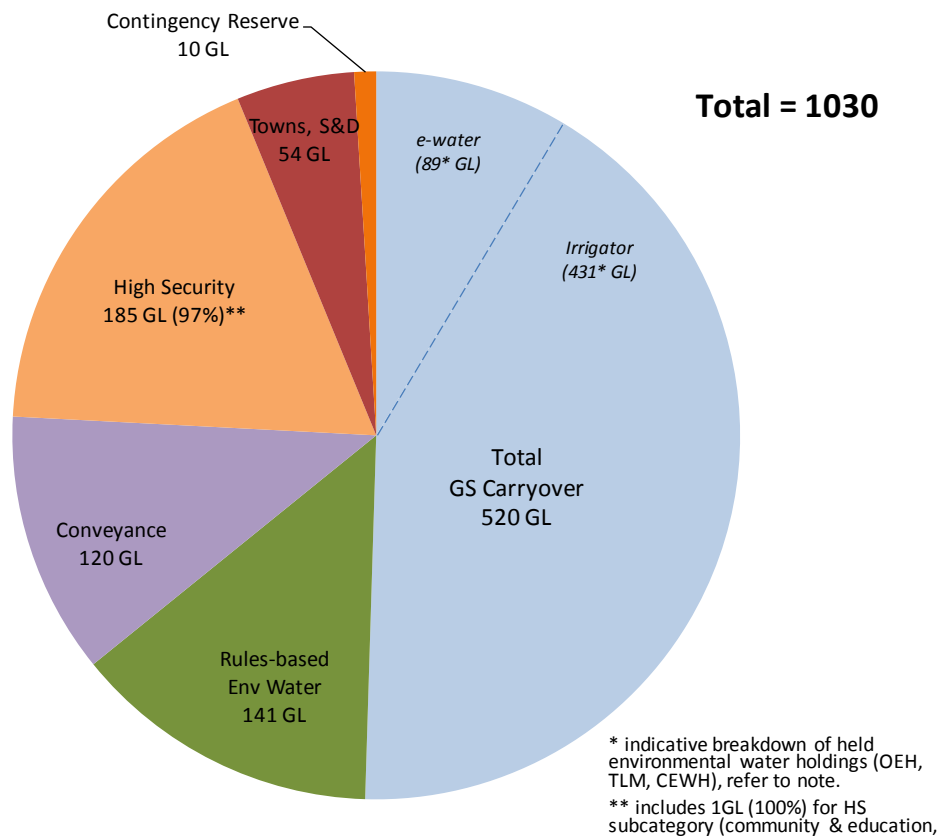
Next announcement

The next water allocation statement for the regulated Murrumbidgee Valley will be issued on **Monday 15 October 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 (2 October) for 2018-19	Volume (GL)
Total Available Resource ⁽¹⁾	1,030
less	
Carryover ^{(2), (7)}	520
Rules based Environmental Water ⁽³⁾	141
Towns, Stock, Domestic ⁽⁴⁾	54 (100%)
Announced High Security subcategory (education, research) ⁽⁴⁾	1 (100%)
Announced High Security ⁽⁴⁾	184 (97%)
Conveyance ⁽⁵⁾	120 (36%)
Reserves ⁽⁶⁾	0
Announced General Security ⁽⁷⁾	0 (0%)
Temporary Reserve ⁽⁸⁾	10

NSW Murray Resource Distribution 2018-19 – 2 October 2018



Resource assessment 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 582GL, and 200GL of flex was pre-released in 2017-18. NSW is 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. Larger Victorian tributary inflows often allow Victoria to step out of Special Accounting earlier than NSW. At such time, as both states must contribute equally (50:50) to South Australian commitments, NSW must provide a matching contribution, prior to NSW receiving its share of the resource. To ensure NSW can meet this commitment during these very dry times, a contingency reserve has been aside in this assessment as per note 8.
- (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) (240 GL – currently 100% borrowed). It also includes River Murray Increased Flows (RMIF) in Hume, accrued as part of the Snowy Water Initiative (currently 95 GL available out of a total commitment of about 115 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, 18 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 impacts of Special Accounting arrangements as set out in the Murray Darling Basin agreement and likely higher losses due to persistent dry and warm conditions. They will be retired as soon as the risk dissipates.

Carryover distribution

While 520 GL of general security carryover in the NSW Murray is equivalent to 31 per cent general security entitlement, the choice to carryover is an individual licence holder decision. In NSW Murray, most licences carried over either little to no water (<5 per cent carryover) or close to the maximum carryover (45-50 per cent of entitlement).

The table below provides information on the distribution of carryover volumes across licences in the valley, sub-divided between licence size and between environmental and consumptive purposes. The distribution shows that the largest volume of carryover is held on the largest one per cent of licences, which also represent a large portion of entitlement within the valley.

About 85 per cent of the valley's entitlement is held on the largest 13 licences, and these licences hold around 90 per cent of the carryover volume.

NSW Murray Carryover Distribution

Share Components	Number of licences	Share Component (GL)	Total Carryover (GL)	Environmental Carryover (GL)	Consumptive Carryover (GL)
Small licences (<0.6 GL)	1152	104	21	<1	20
Medium licences (>0.6GL to about 6 GL)	111	145	27	1	26
Largest licences (> about 6 GL)	13	1393	473	87	386
TOTAL	1276	1642	520 GL	89 GL	432 GL

Note: Excludes Snowy Savings licences, which represent 30 GL of entitlement.