

1 October 2020

NSW Murray and Lower Darling

Water allocation update

There is a **2 per cent** increase to all **general security** water users in the NSW Murray regulated river water source. This brings the total allocation so far this year to 17 per cent of entitlement. Average general security carryover is 21 per cent meaning NSW Murray general security water availability is now 38 per cent of entitlement. Allocations in the **Lower Darling remain unchanged**.

The NSW Murray resource has improved by about 45,000 megalitres (ML) since the last assessment. Rainfall in September has been below average, with the catchment and channel systems slowly drying and inflows falling. The resource improvement comes from better than expected flow recessions and reduced losses, and has been allocated to general security, with a commensurate increase to Conveyance entitlements in accordance with the Water Sharing Plan.

The focus to date has been to safely allocate as much water as possible early, to allow water users to plan for maximum production. However, as we enter the southern dry season (based on historical records), attention will soon need to shift more to meeting high priority needs in 2021/22. Nevertheless, the recent declaration of La Niña conditions by the Bureau of Meteorology augurs well for likely wetter conditions into summer and improved water availability.

Special Purpose Access Licences that were issued for temporary critical conveyance needs during the recent severe water shortage will now lapse in accordance with their licence conditions as general security allocation in the NSW Murray now exceeds 15 per cent of entitlement.

Inflow conditions remain on track to trigger “exceptional circumstances” in November under the Barmah Millewa EWA rules. This means pay-back of the borrowed water will commence when announced general security allocation reaches 50 per cent of entitlement, not the usual 30 per cent. Average inflow conditions or wetter will be needed to trigger Barmah Millewa EWA payback.

The Menindee Lakes system is currently 27 per cent full, holding around 470,000 ML, with minor inflows expected to continue over the next few weeks. It is being managed by NSW to meet Lower Darling needs only. The Menindee resource becomes shared with other States when the system next holds more than 640,000 ML.

Further significant inflows are required into the Menindee system before the current 30 per cent general security allocation for Lower Darling water users can be increased. Together with average carryover of 48 per cent, general security water availability is 78 per cent of entitlement.

2020-21	High Security	General Security	Average Carryover	Drought Stage
Murray	97%	17%	21%	 Stage 1
Lower Darling	100%	30%	48%	 Stage 2

Drought stage

The **NSW Murray** regulated river water source was eased to Stage 1 drought criticality at the end of July as all shortfalls for 2020/21 were met and general security allocations commenced. Normal river operations are able to deliver water orders. The **Lower Darling** regulated river water source remains in Stage 2 drought criticality. Resource conditions are being carefully monitored, with the need to provide longevity of supply in the Lower Darling for critical human and high priority needs.

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

Murray storage levels (as at 29 September 2020)*

- Dartmouth Dam is 56 per cent full – steady – holding 2,180,000 ML.
- Hume Dam is 67 per cent full – rising – holding 2,010,000 ML.
- Lake Victoria is 99 per cent full – rising – holding 670,000 ML.

* The NSW share of this water is approximately 36%, 51% and 42% for these storages respectively, or 43% in total.

State sharing of the Murray resource

The bulk accounts assessment indicates that 5,060 gegalitres (GL) of total shared Murray resource is available in the extreme dry (99th percentile) case, of which about 1,920 GL is needed to run the system (incorporating South Australia's dilution entitlement and any shared resource which cannot be regulated). The NSW portion of the regulated shared resource is 1,400 GL based on rules in the Murray-Darling Basin Agreement. Following adjustments including South Australia's non-dilution entitlement, trade, tributary inflows and usage to date, the assessment results a volume of Murray resource for NSW to allocate of 1,210 GL.

The bulk resource assessed by MDBA includes supplementary and uncontrolled flow diversion in the NSW usage. Therefore the 1,330 GL assessed share of Murray resource is reduced by 120 GL to 1,210 GL to account for water used from unregulated water sources. This unregulated usage has not reduced the liability on regulated water, therefore cannot contribute to more allocation.

This does not mean that supplementary access adversely impacts on water availability – it cannot because it relates to a different (unregulated) water source.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for October to December indicates likely wetter than average conditions across the catchment. Daytime temperatures are likely to be about average or cooler, while overnight temperatures are likely to be warmer than average.

The Bureau has declared La Niña conditions, with models indicating that La Niña conditions are likely to persist until at least early 2021. Negative Indian Ocean Dipole (IOD) conditions are also likely to be negative for October. La Niña and negative IOD conditions typically increase the probability of above average rainfall in spring.

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

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 address the physical constraint at the choke and protect existing downstream entitlement holders from an increased risk of delivery shortfall. 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 across the Barmah choke.

Temporary trade between the Lower Darling and the Murray is closed and typically remains closed until the system recovers to hold more than 640 GL of water and the Menindee Lakes become part of the shared Murray system. Trade within the Lower Darling water source is allowed.

The normal operating range for the Murrumbidgee IVT account is between 0 GL and 100 GL. Trade **out** of the Murrumbidgee valley is **closed** (as of 30 September 2020) with an IVT balance of 101.7 GL. Trade **into** the Murrumbidgee valley is **open**. Water users should monitor WaterNSW website (www.waternsw.com.au) for daily information about the IVT account balance and the status of trade.

Next announcement

The next water allocation statement will be published on **Thursday 15 October 2020**. It will be a comprehensive statement, including the likely improvement in general security allocations under a range of possible inflow scenarios.

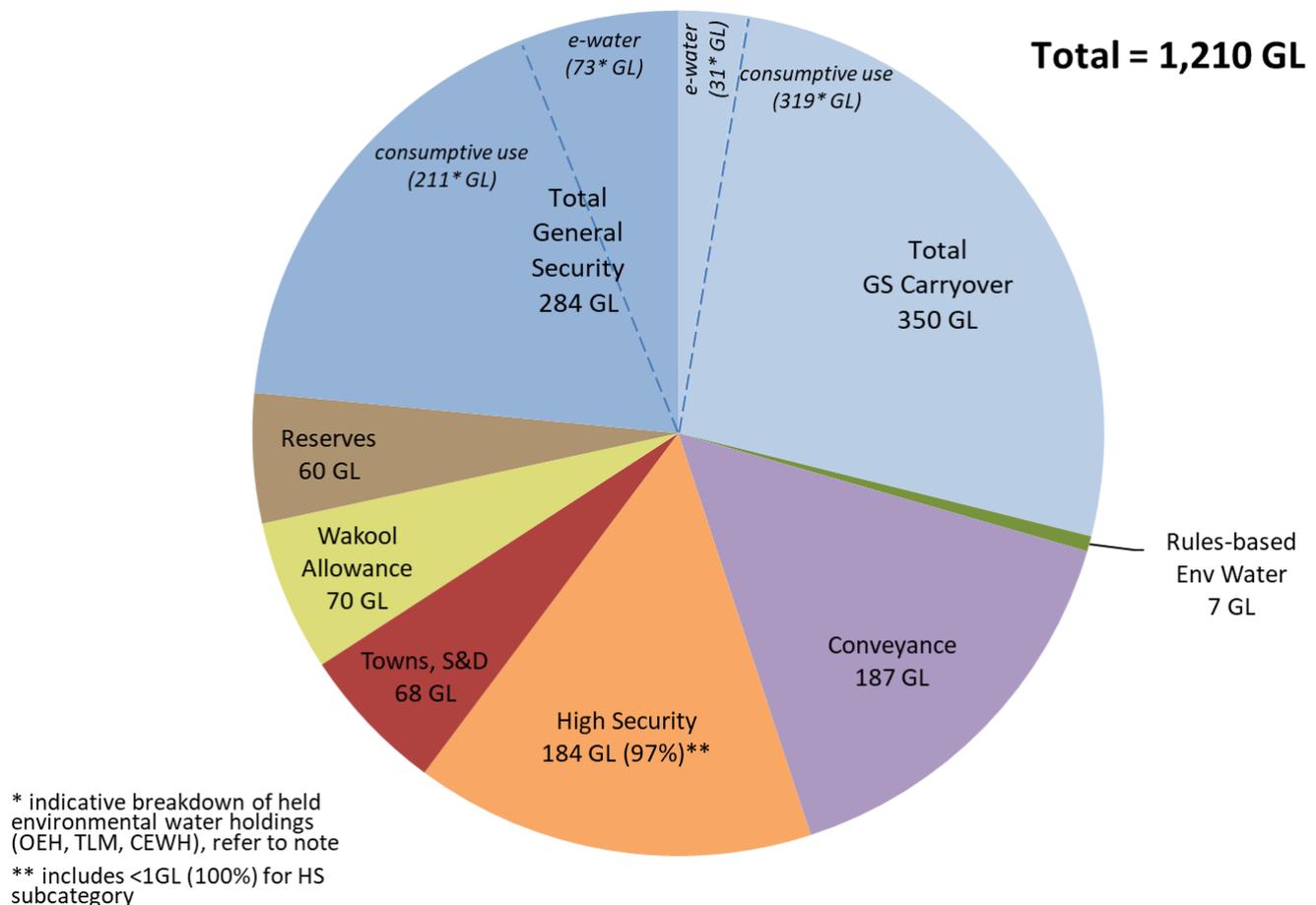
NSW Murray resource assessment data sheet

Resource Distribution* (1 October) for 2020-21	Volume (GL)
Total Available Resource ⁽¹⁾	1,210 [#]
less	
Carryover ^{(2), (8)}	350
Rules based Environmental Water ⁽³⁾	7
Towns, Stock, Domestic ⁽⁴⁾	68 (100%)
Announced High Security subcategory ⁽⁴⁾	<1 (100%)
Announced High Security ⁽⁴⁾	184 (97%)
Conveyance ⁽⁵⁾	187 (57%)
Wakool Allowance ⁽⁶⁾	70
Reserves ⁽⁷⁾	60
Announced General Security ⁽⁸⁾	284 (17%)
Year 2 (2021-22) high priority needs ⁽⁹⁾	0

*See notes below

[#]Resource adjusted by supplementary and uncontrolled flow usage (refer above to State sharing of the Murray resource)

NSW Murray resource distribution 2020-21 – 1 October 2020



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 M1 releases to date for this water year (2020-21) is estimated to be about 533GL. 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 forecasts indicate that NSW is unable to meet the required reserve of 1,250GL 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 (PEW) – water required to be set aside to provide for riverine environments, as per water sharing plan and other inter-jurisdictional agreements. In the NSW Murray this includes the Murray Additional Allowance (MAA) (about 6GL) and the Barmah-Millewa Allowance (B-MA) (about 305GL – currently 100% borrowed). It also includes River Murray Increased Flows (RMIF) in Hume, accrued as part of the Snowy Water Initiative (currently about 1GL). 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, 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”. Drought critical conveyance water allocated under Special Purpose Access Licences to small irrigation districts for running channels to supply high priority entitlements has been included in this category, totalling about 6GL.
- (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) Wakool Allowance – a conveyance volume necessary for NSW to operate the Edward-Wakool system. Typically up to 70 GL.
- (7) Reserves – required primarily under statutory plans, up to 61GL; set aside for critical human needs in accordance with Clause 11.03 of the Basin Plan.
- (8) 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 82 GL of GS, 25 GL of HS, 28 GL of conveyance allocation and 31 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.
- (9) 2021-2022 high priority needs on 1 July 2021 - volume set aside to cover high priority needs on 1 July 2021, for ‘Year 2’, including potential carryover.

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