

1 September 2020

NSW Murray and Lower Darling

Water allocation update

There is a **4% increase to all general security entitlements** in the NSW Murray regulated river water source. This brings the total allocation for this year to 12% and with average general security carryover of 21%, it means NSW Murray general security water availability has reached 33% of entitlement. Allocations in the **Lower Darling remain unchanged**.

The NSW Murray resource has improved by about 70,000 megalitres (ML) since the last assessment. Rainfall in August has tracked near average for headwater catchments and resources continue to build. The resource improvement has been allocated to general security, with a commensurate increase to Conveyance entitlements in accordance with the water sharing plan.

Unregulated conditions below storages have allowed supplementary and uncontrolled flow access to be extended into September. Supplementary announcements can be found at:

www.watersw.com.au/supply/regional-nsw/supplementary

Further resource improvements will be allocated to general security entitlements, ensuring there is enough water for high priority needs in 2021-22 as required by the water sharing plan.

Inflow conditions are on track to trigger 'exceptional circumstances' under the Barmah Millewa EWA rules, meaning pay-back of the borrowed water will commence when announced general security allocation reaches 50% of entitlement, not the usual 30%.

The Menindee Lakes system experienced a partial recovery in 2019-20 from the arrival of northern basin inflows. It is currently around 26% full, holding around 455,000 ML, with minor inflows continuing over the next few weeks. The Lower Darling is administratively disconnected from the Murray, therefore, the resources in the Menindee Lakes system are being managed by NSW to meet Lower Darling needs only. The Menindee system is being operated with minimum releases to maximise longevity of supply and is expected to slowly deplete without further significant inflows.

Further significant inflows are required into the Menindee system before the current 30% general security allocation for Lower Darling water users can be increased.

2020-21	High Security	General Security	Average Carryover	Drought Stage
Murray	97%	12%	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 closely monitored, with the system being managed as a drought reserve, ensuring 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 31 August 2020)*

- Dartmouth Dam is 55% full – rising – holding 2,120,000 ML.
- Hume Dam is 62% full – rising – holding 1,860,000 ML.
- Lake Victoria is 95% full – falling – holding 645,000 ML.

* NSW share of this water is approximately 35%, 51% and 42% for these storages respectively, or 42% in total.

State sharing of the Murray resource

The forecast end of August accounts indicate that 4,950 gigalitres (GL) of total shared Murray resource is available in the extreme dry (99th percentile) case, of which about 2,040 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 remaining shared resource is 1,260 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 to **share of Murray resource of 1,090 GL for NSW to allocate**.

The bulk resource assessed by MDBA included all NSW usage, including supplementary and uncontrolled flow diversion, was 1,120 GL and inflated the water available to NSW. This is because extraction from unregulated flow does not reduce the liability of regulated water in accounts. The correct volume for NSW to allocate is 30GL less – the estimated diversion from unregulated flows.

This does not mean that supplementary access adversely impacts water availability – it cannot because it is a different (unregulated) water source. It simply means the MDBA assessment provided too much water to NSW which, if allocated, increases the risk of future shortfall.

Climatic outlook

The Bureau of Meteorology's seasonal outlook for September to November indicates that rainfall conditions are likely to be wetter than average across the catchment. Daytime temperatures are likely to be near average or warmer, while overnight temperatures are likely to be warmer than average.

The Bureau indicates that the El Niño-Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) are neutral. The Bureau has issued a La Niña WATCH alert, with some models indicating that La Niña conditions may develop over spring. There is also a possibility of negative IOD conditions developing over spring. La Niña and negative IOD conditions typically increase the probability of above average rainfall during 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.

On 1 July 2020, the trade capacity was reset to a small positive number that reflects the volume of annual Snowy Savings that will not need to be delivered downstream through the choke. This balance has since been consumed.

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.

Trade **out** of the Murrumbidgee Valley is **closed** (as of 31 August 2020) with an IVT balance of 99.9 GL. Trade **into** the Murrumbidgee Valley is **open**. Water users should monitor the 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 **Tuesday 15 September 2020**. It will be a comprehensive statement, including the likely improvement in general security allocations under various inflow scenarios.

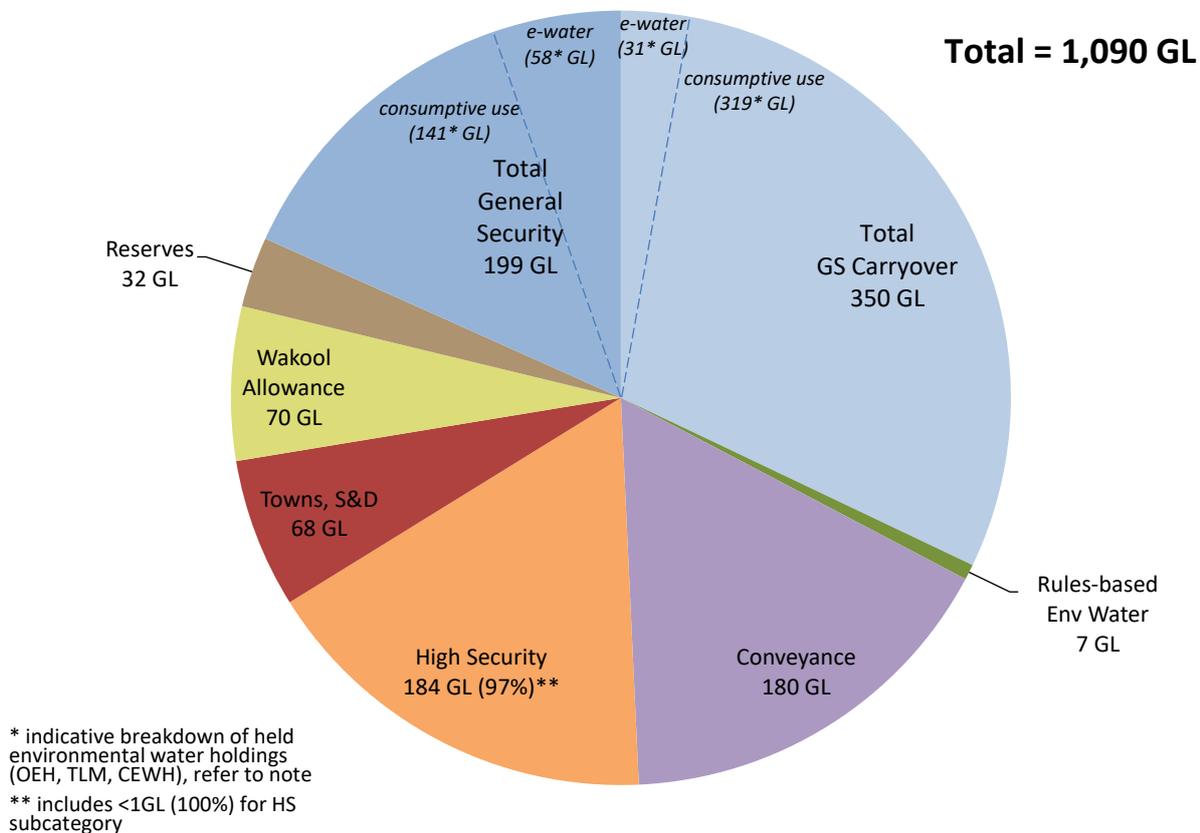
NSW Murray resource assessment data sheet

Resource Distribution* (1 September) for 2020-21	Volume (GL)	Volume (GL)
Total Available Resource ⁽¹⁾		1,090 [#]
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⁾	180 (55%)	
Wakool Allowance ⁽⁶⁾	70	
Reserves ⁽⁷⁾	32	
Announced General Security ⁽⁸⁾	199 (12%)	
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 September 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 510GL. 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 301GL – 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 58 GL of GS, 24 GL of HS, 27 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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