

1 August 2022

NSW Murray and Lower Darling

Water allocation update

There is a 2% increase to general security allocation in the NSW Murray regulated river water source. This brings the total cumulative allocation to general security in the NSW Murray to 51% of entitlement for this water year. All Lower Darling regulated river entitlements, including general security, received their maximum allocation (100%) for this water year on 1 July 2022.

Incremental resource improvements are occurring, however; full storages and low usage is limiting available airspace to capture new inflows and is affecting resource improvement. Increased usage, along with healthy inflows, are required for significant allocation improvements.

With general security allocations now reaching 51% and average general security carryover of approximately 46%, total NSW Murray general security water availability is around 97%. General security entitlements in the NSW Murray Valley have an account limit of 110%.

Due to continuing wet conditions, unregulated flows have extended into this water year, producing supplementary access conditions. Subject to their licence conditions and approved periods of access, water users can access supplementary water and use uncontrolled flow provisions. Supplementary access details can be found at: waterinsights.watarnsw.com.au

Unregulated flows are being used to meet obligations to South Australia, including Additional Dilution Flow requirements as required by the Murray Darling Basin Agreement.

The Barmah Millewa Environmental Water Allowance (BMEWA) account is fully available as of 1 July 2022. There is no payback required, therefore further resource improvements will accrue to general security licences until full allocations are achieved.

Information on the Murrumbidgee Intervalley Trade (IVT) balance spill (scheduled for 31 August 2022) is provided below in this statement.

The Menindee Lakes System (MLS) has been surcharged due to significant inflows from the northern basins, with the current combined MLS storage holding around 1,965,000 megalitres (ML). The MLS can be safely surcharged to a maximum of around 2,039,000 ML.

2022/23	High Security	General Security	Average Carryover
Murray	97%	51%	46%^
Lower Darling	100%	100%#	7%*^

Availability of allocation on individual licences is subject to account limits as per the rules in the Water Sharing Plan.

* Carryover in private accounts can be considered forfeited and replaced by allocation when full allocations are announced.

^ Carryover is subject to minor adjustments as accounts are finalised for the 2021/22 water year.

Murray storage levels (as at 1 August 2022)*

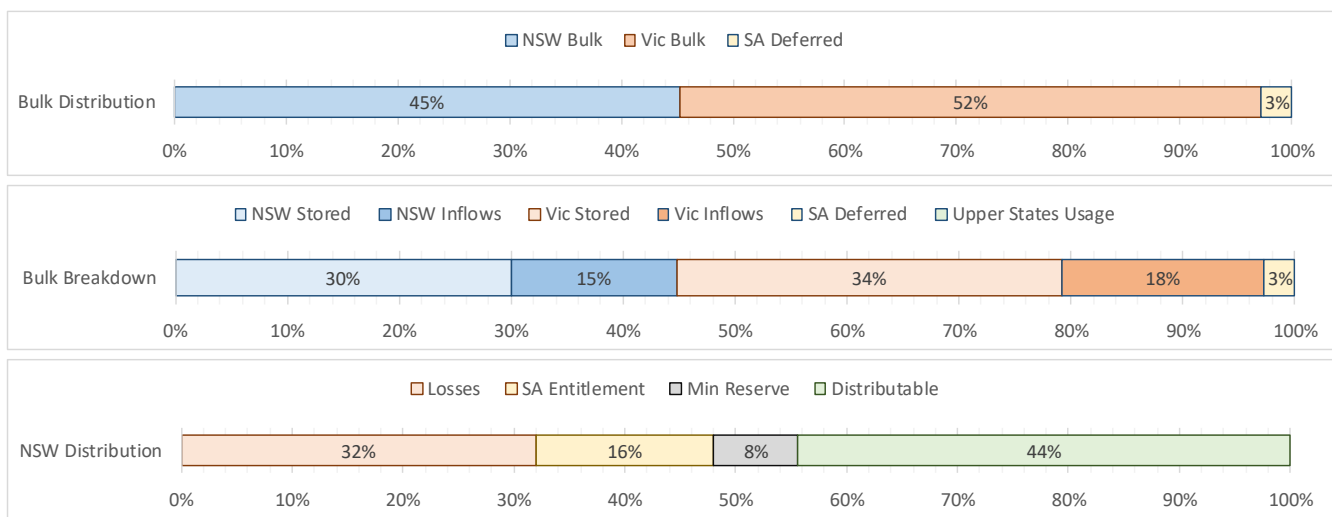
- Dartmouth Dam is 96% full – stable – holding 3,685,000 ML.
- Hume Dam is 92% full – falling – holding 2,765,000 ML.
- Lake Victoria is 51% full – rising – holding 420,000 ML.
- Menindee Lakes System is 111% full – rising – holding 1,965,000 ML.

* The NSW share of this water is approximately 37%, 50%, 37% and 37% for these storages respectively, or 41% in total (averaged across all storages).

Sharing of the Murray resource

The bulk accounts assessment indicates that around 12,150 gigalitres (GL) of total shared Murray resource is available in the extreme dry (99th percentile) case. The NSW share of this resource is approximately 5,500 GL, based on the rules in the Murray-Darling Basin (MDB) Agreement. After removing commitments required under the MDB Agreement, including anticipated losses in operating the River Murray System, South Australia’s entitlement flow and the minimum reserve, the assessment results in a volume of Murray resource for NSW to allocate of 2,440 GL.

Distribution of Murray Resources*



*No material upper states usage recorded yet in the water year.

The breakdown of the Murray resources is provided in the graphs above. The breakdown is based on the 99% inflow scenario, which is the scenario used by NSW for its allocations and water sharing framework. The NSW government’s acceptable risk, on behalf of all water users including towns and the environment, is given in the water sharing plan. NSW is required to work to the minimum inflow scenario prior to the commencement of the plan (2004). The MDBA’s 99% scenario closely aligns with the minimum inflow pre-2004. Therefore, NSW distributes the volume provided by the MDBA’s 99% scenario to satisfy the water sharing plan.

It is important to note that other jurisdictions make allocations based on their own water sharing framework and risk appetite. Therefore, this 99% (extreme dry) scenario should not be used to infer allocation announcements by other jurisdictions.

Additional notes for the graphs are provided below:

- **Bulk Distribution Graph** – distribution of bulk resource into NSW’s bulk share, Victorian bulk share and South Australia’s deferred storage. **Of the total resource available in the Murray under the 99% scenario, NSW is entitled to approximately 45%.**
- **Bulk Breakdown Graph** – breakdown of distribution of bulk resource, as per the Bulk Distribution graph, by state and resource source (i.e. stored water vs future inflow). **Of the 45% of the total bulk resource which NSW is entitled to (under the Bulk Distribution Graph), approximately 30% is sourced from stored water and 15% is sourced from future inflows, with the remainder coming from usage to date (currently negligible).**
 - Future inflow includes minimum inflows into major storages, expected tributary inflows and un-delivered IVT balance.
 - As the distributable resource is comprised of usage to date, usage in NSW and Victoria contributes to the total resource made available to date. Note, other jurisdictions may report on remaining account balances, which does not require the incorporation of usage to date. NSW reports on total water made available to date, which must include water which has been used to date.
- **NSW Distribution Graph** – breakdown of the resource which NSW is entitled to (i.e. the 45% component of the bulk resource under the Bulk Distribution Graph).
 - 32% of the resource NSW is entitled to is required for losses.
 - 16% of the resource NSW is entitled to is required to meet commitments to South Australia (dilution and non-dilution) as per the Murray Darling Basin Agreement.
 - 8% of the resource NSW is entitled to is required to meet minimum reserve requirements as per the Murray Darling Basin Agreement.
 - **Therefore, 44% of the resource is for NSW to distribute across its rights and entitlement holders in accordance with the water sharing plan.**

Climatic outlook

The Bureau of Meteorology’s seasonal outlook for August to October indicates that rainfall is likely to be above average across the catchment. Day time temperatures are likely to be below average for majority of the catchment, while overnight temperatures are likely to be above average .

The Bureau’s El Niño-Southern Oscillation (ENSO) outlook is on La Niña WATCH, meaning there is an elevated chance of it developing later in the year. The Indian Ocean Dipole (IOD) index is near the negative IOD threshold, with models indicating that negative IOD conditions may develop in the coming weeks. A negative IOD increases the chances of above average winter–spring rainfall for much of Australia.

Further details at: 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. Water users are advised 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 open and will likely remain open until the Menindee Lakes system next falls below 480 GL. Trade within the Lower Darling regulated river water source remains open.

Trade **out** of the Murrumbidgee is **closed**, while trade **into** the Murrumbidgee Valley is **open** (as of 1 August 2022). Water users should monitor the WaterNSW website (www.waternsw.com.au) for daily information about the IVT account balance, the status of trade, and other information. The IVT account balance at the end of the previous water year has carried forward into this water year. The normal operating range for the Murrumbidgee IVT account is between 0 GL and 100 GL. (See IVT section below for information on the imminent IVT account spill).

Uncontrolled Flow (without debit take)

The water sharing plan permits general security water users in the NSW Murray to take water from uncontrolled flows (i.e. unregulated flows) without debit of their account water. This is permitted during periods of announced supplementary access. Supplementary access details can be found at: waterinsights.waternsw.com.au

Without debit take from uncontrolled flows by individual general security entitlements is subject to the following rules:

- Without debit take from uncontrolled flows (i.e. during periods of unregulated flows when supplementary access is permitted) is allowed when the general security allocations for the current water year are less than or equal to 60% of entitlement (i.e. 0.6 megalitres per unit share component). Exercising of without debit take provisions is subject to the licence conditions of the respective individual entitlement/licence.
- General security allocations in the current year, plus carryover, plus without debit take from uncontrolled flows, cannot exceed 100% of an individual entitlement's share components (i.e. 1 megalitre per unit share component). Should these respective values sum to greater than 100% (for example, due to allocations increasing), then without debit take volumes will be converted to debit take (i.e. water will be withdrawn from the water account), to the extent necessary to bring the sum down to 100%.
- When general security allocations in the current year plus carryover is 100% (i.e. 1 megalitre per unit share) or greater for an individual entitlement, it cannot take water without debit from uncontrolled flows. Any take from uncontrolled flows will be with debit to the water account.

Water users should refer to the licence conditions of their individual licences for further details of rules applicable to their entitlements.

IVT in 2022/23

When water physically spills from Murrumbidgee storages (including pre-releases for airspace operations), a decision must be made to spill or retain any IVT balance. The NSW Murray total general security water availability is currently 97% (comprised of 51% allocation and 46% carryover), which is significantly higher than the Murrumbidgee total general security water availability of 66% (comprised of 38% allocation and 28% carryover). **Therefore, a decision has been made to spill the IVT balance to help boost Murrumbidgee allocations.**

The full volume of the Murrumbidgee IVT account balance will be spilt on 31 August 2022. This removal of water from the IVT account will open trade opportunity to the Murray on the morning of 31 August 2022. Water users should monitor the WaterNSW website (www.waternsw.com.au) for detailed information on trade.

Next announcement

The next water allocation statement will be published on **Monday 15 August 2022**. It will include the likely improvement in general security allocations under various inflow scenarios.

Note: NSW Murray statements are now available online about 2:30pm on the day of the publication.

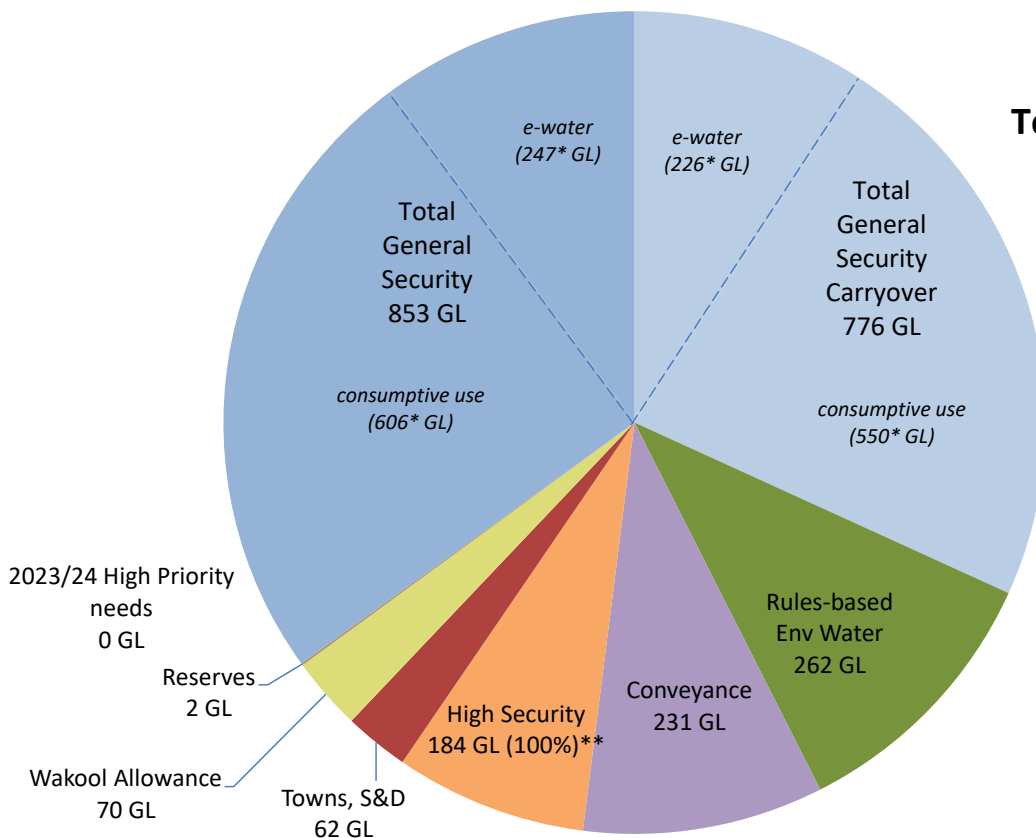
NSW Murray resource assessment data sheet

Resource Distribution* (1 August) for 2022/23	Volume (GL)
Total Available Resource ⁽¹⁾	2,440
<i>less</i>	
Carryover ^{(2), (8)}	776
Rules based Environmental Water ⁽³⁾	262
Towns, Stock, Domestic ⁽⁴⁾	62 (100%)
Announced High Security subcategory ⁽⁴⁾	<1 (100%)
Announced High Security ⁽⁴⁾	184 (97%)
Conveyance ⁽⁵⁾	231 (70%)
Wakool Allowance ⁽⁶⁾	70
Reserves ⁽⁷⁾	2
Announced General Security ⁽⁸⁾	853 (51%)
Year 2 (2023-24) high priority needs ⁽⁹⁾	0

*See notes below

NSW Murray resource distribution 2022/23 – 1 August 2022

Total = 2,440 GL



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

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 (2022/23) is estimated to be about 350 GL. NSW is not in Special Accounting with South Australia (SA) as of 1 August 2022. The details of Special Accounting can be found in the MDB Agreement clauses 123-129. Special Accounting is triggered when forecasts indicate that NSW will have an end of year reserve of less than 1,250 GL.
- (2) Carryover - NSW Murray General Security water users can carryover a maximum account balance of 50% of their entitlement into the following water year. The account limit is 110% 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 the Water Sharing Plan and other inter-jurisdictional agreements. In the NSW Murray this includes the Murray Additional Allowance (MAA) (currently 6 GL), Barmah-Millewa Allowance (B-MA) (200 GL - fully available). It also includes River Murray Increased Flows (RMIF) in Hume, accrued as part of the Snowy Water Initiative (currently 56 GL). The total commitments to MAA, 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".
- (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 is required.
- (7) Reserves – required primarily under statutory plans, up to 61 GL; 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 247 GL of GS, 226 GL of GS carryover, 24 GL of HS, 35 GL of conveyance allocation. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Department of Planning and Environment, The Living Murray and the Commonwealth Environmental Water Holder. Details on environmental holdings can be found on individual agency websites.
- (9) 2023-2024 high priority needs on 1 July 2023 - volume set aside to cover high priority needs on 1 July 2023, for 'Year 2'.

Allocations in 2022/23 for NSW Murray

Date	License Category	Increment		Total 2022/23	
1-Jul	Domestic & Stock	100%		100%*	
1-Jul	Local Water Utility	100%		100%*	
1-Jul	High Security (sub-categories)	100%		100%*	
1-Jul	High Security	0.97	ML/unit share	0.97	ML/unit share
1-Jul	Supplementary	1.00	ML/unit share	1.00*	ML/unit share
1-Jul	General Security	0.43	ML/unit share	0.43	ML/unit share
1-Jul	Conveyance	0.6670	ML/unit share	0.6670	ML/unit share
15-Jul	General Security	0.06	ML/unit share	0.49	ML/unit share
15-Jul	Conveyance	0.0233	ML/unit share	0.6903	ML/unit share
1-Aug	General Security	0.02	ML/unit share	0.51	ML/unit share
1-Aug	Conveyance	0.0077	ML/unit share	0.6980	ML/unit share

* Maximum allowable

Allocations in 2022/23 for Lower Darling

Date	License Category	Increment	Total 2022/23
1-Jul	Domestic & Stock	100%	100%*
1-Jul	Local Water Utility	100%	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/unit share*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share*
1-Jul	General Security	1.00 ML/unit share	1.00 ML/unit share*

* Maximum allowable

Water allocation guide

The NSW Department of Planning and Environment – Water has produced a series of guides to describe the water allocation methods for most NSW regulated river systems. The guide for the NSW Murray regulated system is available at the following link:

www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

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