

15 August 2022

NSW Murray and Lower Darling

Water allocation update

There is a **59% increase to general security allocation in the NSW Murray regulated river water source**. This means that general security allocation has reached its maximum limit of 110% of entitlement in accordance with the water sharing plan and is now fully allocated for the 2022/23 water year. Additionally, high security and conveyance entitlements have also been incremented to their full allocation of 100% of entitlement.

All **Lower Darling** regulated river entitlements, including **general security**, received their maximum allocation (100%) for this water year on 1 July 2022.

Wet conditions have resulted in a resource improvement of approximately 286,000 megalitres (ML) since the last assessment. Additional resource was also freed by reducing the Wakool system allowance from 70,000 ML to 40,000 ML, due to the ongoing wet conditions meeting the requirements of this allowance.

The ongoing wet conditions are further prolonging access by supplementary licence holders. Subject to their licence conditions and approved periods of access, supplementary access licence holders can continue to take water. Details of supplementary access opportunity can be found at: waterinsights.watarnsw.com.au

However, **general security uncontrolled flow access provisions are no longer available**, as full allocations for general security have been achieved.

The Barmah Millewa Environmental Water Allowance (BMEWA) account is fully available in 2022/23.

Information on the **Murrumbidgee Intervalley Trade (IVT) balance spill** (scheduled for 31 August 2022) and a **temporary restriction to interstate trade** is provided below in this statement.

The Menindee Lakes System (MLS) is currently surcharged, due to significant inflows from the northern basins, with the current combined MLS storage holding around 2,000,000 ML. The MLS can be safely surcharged to a maximum of around 2,039,000 ML. Operations updates from WaterNSW can be found at: waterinsights.watarnsw.com.au

Further improvements in resource will be used to assure high priority needs for 2023-24, and subject to sufficient resource being available, assist in an opening allocation to general security.

2022/23	High Security	General Security	Average Carryover
Murray	100%	110%#	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.

Murray storage levels (as at 15 August 2022)*

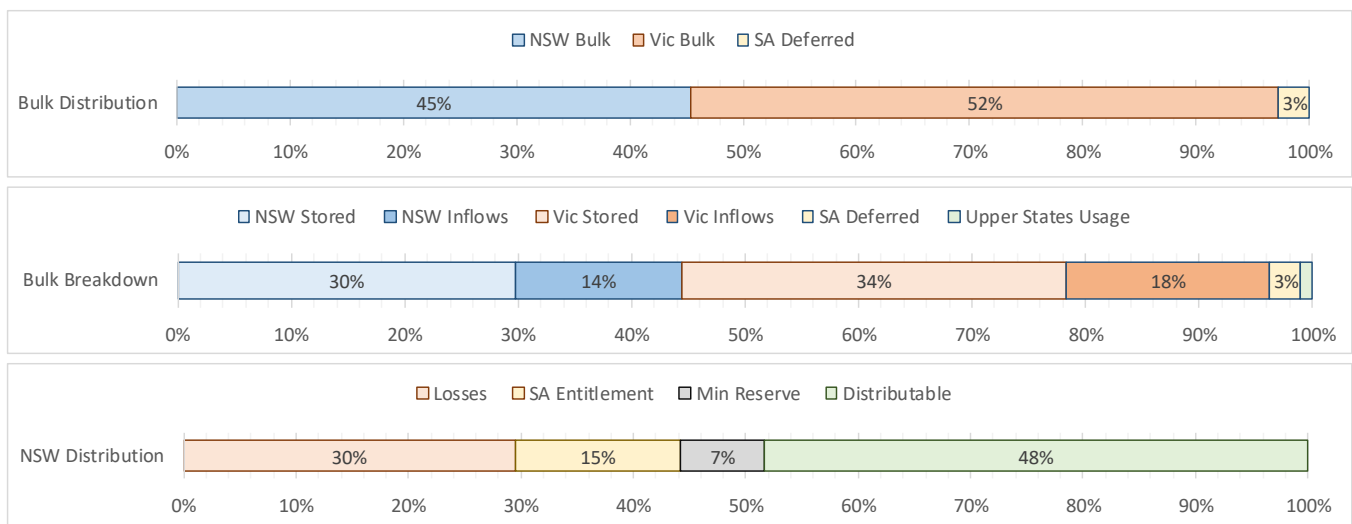
- Dartmouth Dam is 98% full – stable – holding 3,775,000 ML.
- Hume Dam is 96% full – stable – holding 2,890,000 ML.
- Lake Victoria is 58% full – falling – holding 390,000 ML.
- Menindee Lakes System is 115% full – stable – holding 2,000,000 ML.

* The NSW share of this water is approximately 38%, 50%, 38% and 38% for these storages respectively, or 41% in total (averaged across all storages).

Sharing of the Murray resource

The bulk accounts assessment indicates that around 12,365 gigalitres (GL) of total shared Murray resource is available in the extreme dry (99th percentile) case. The NSW share of this resource is approximately 5,630 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 2,726 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 14% is sourced from future inflows (note, there is a 1% rounding difference), with the remainder coming from usage to date.**
 - 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).
 - 30% of the resource NSW is entitled to is required for losses.
 - 15% 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.
 - 7% of the resource NSW is entitled to is required to meet minimum reserve requirements as per the Murray Darling Basin Agreement.
 - Therefore, **48% 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 September to November 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 currently exceeding the negative IOD threshold, with models indicating that negative IOD conditions may continue into summer. 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 15 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 was carried forward into this water year. The normal operating range for the Murrumbidgee IVT account is between 0 GL and 100 GL.

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. With NSW Murray allocations faring better than Murrumbidgee allocations, a decision to spill the IVT balance was made in July 2022, with the **spill to take effect on 31 August 2022**. The 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.

Interstate 71V restriction

A temporary restriction on interstate water trades (clause 71V of the *Water Management Act 2000*) into the NSW Murray, Lower Darling and Murrumbidgee regulated river water sources from other states was announced on 5 August 2022.

Interstate trades are typically accompanied by a reassignment of physical water (resource) in storages from the selling state to the buying state. Due to full storages and ongoing wet conditions, there is limited capacity to hold reassigned resource and a high risk that any resource which is reassigned will spill. Therefore, interstate trades into NSW cannot be safely underpinned by resource. Should NSW accept incoming interstate trades, it is likely that it may have to lean on current resources, which have already been allocated, to meet the trade. This would adversely impact existing NSW Murray allocations and water users. Therefore, a temporary restriction on interstate trades into NSW has been put in place to protect NSW water users.

The temporary restriction will remain in force until 31 December 2022, unless repealed earlier should NSW storage levels reduce sufficiently to safely receive traded water.

More information on temporary water restrictions can be found at the following link: www.industry.nsw.gov.au/water/allocations-availability/temporary-water-restrictions

Next announcement

As all entitlements in the NSW Murray have reached their full allocation, publication of regular statements will cease until March 2023.

From Wednesday 15 March 2023, monthly statements will commence to communicate the potential water availability on 1 July 2023 for the 2023-24 water year. This should help water users with their end of year water management decisions.

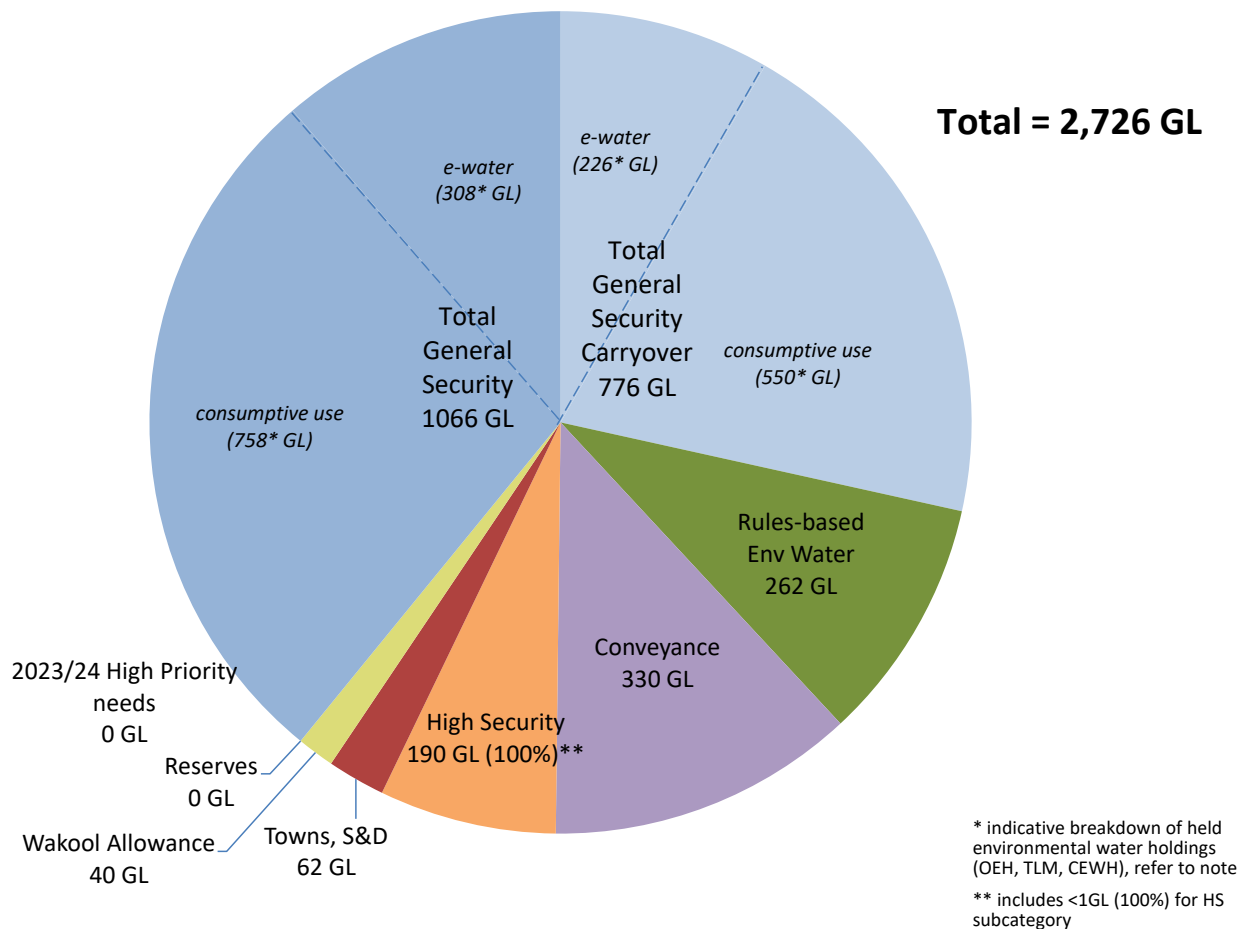
Note: NSW Murray statements are now available online about 2:30pm on the day of the publication.

NSW Murray resource assessment data sheet

Resource Distribution* (15 August) for 2022/23	Volume (GL)
Total Available Resource ⁽¹⁾	2,726
less	
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⁾	190 (100%)
Conveyance ⁽⁵⁾	330 (100%)
Wakool Allowance ⁽⁶⁾	40
Reserves ⁽⁷⁾	0
Announced General Security ⁽⁸⁾⁽⁹⁾	1,066 (110%)
Year 2 (2023-24) high priority needs ⁽¹⁰⁾	0

*See notes below

NSW Murray resource distribution 2022/23 – 15 August 2022



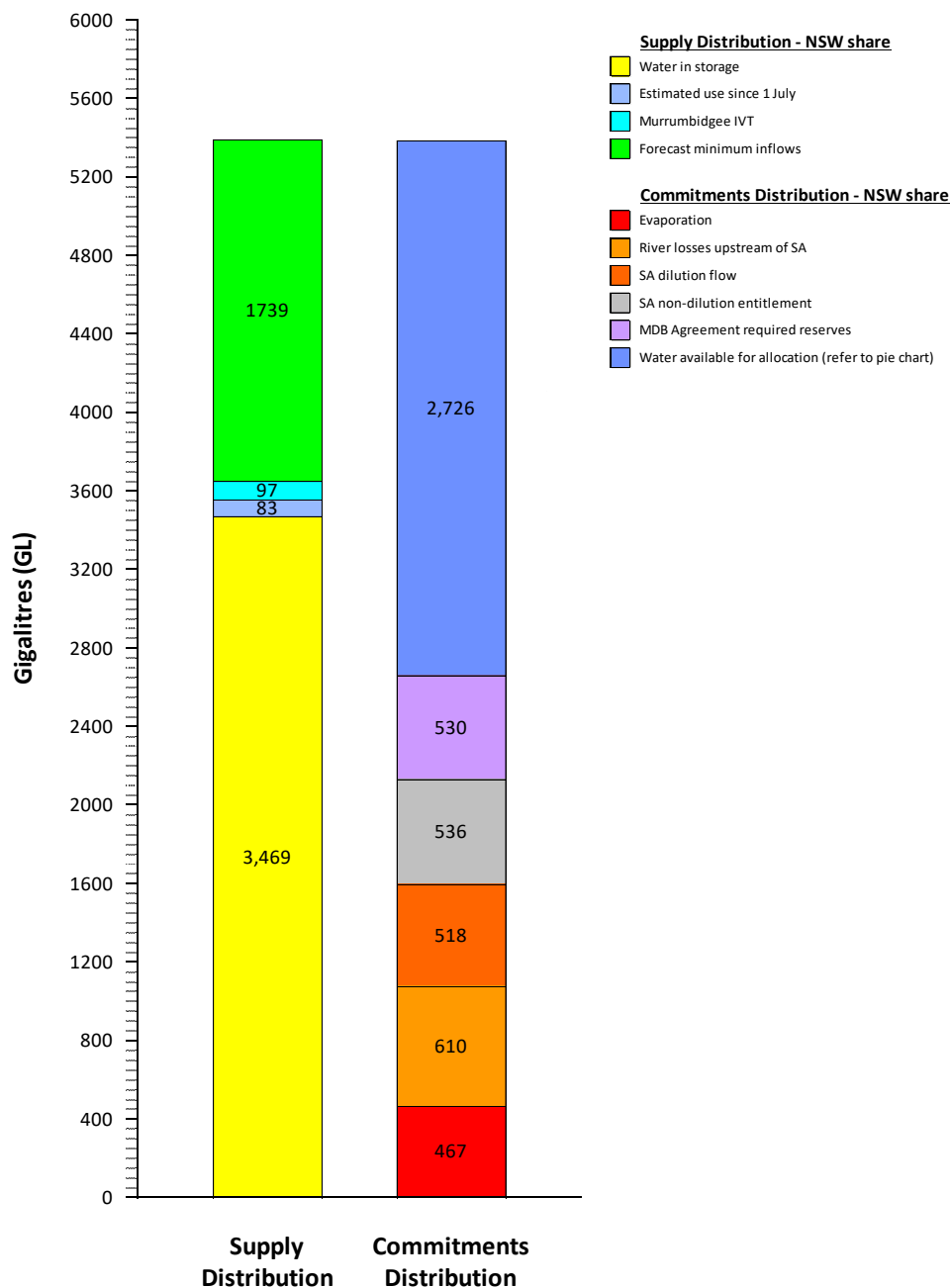
Data sheet notes

- (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 440 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 (GS) 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 100% 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 GS allocation.

- (6) Wakool Allowance – a conveyance volume necessary for NSW to operate the Edward-Wakool system. Typically up to 70 GL is required, however due to wet conditions it has been reduced to 40GL.
- (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 GS 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 308 GL of GS, 226 GL of GS carryover, 25 GL of HS, 50 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) GS carryover plus allocation is equal to 1842 GL, equating to 110% of general security. GS cannot exceed 110%.
- (10) 2023-2024 high priority needs on 1 July 2023 - volume set aside to cover high priority needs on 1 July 2023, for 'Year 2'.

NSW Murray water balance – 15 August 2022



Water balance notes:

- (1) Supply and Commitments Distribution – The volumes in the categories shown are only those relating to NSW's share of the resource, at the end of the preceding month. The categories include the following:
- **Water in storage:** Volumes in the dams at the end of the previous month. (Excludes water in storage unavailable to NSW under the water sharing arrangements of the Murray Darling Basin Agreement).
 - **Estimated use since 1 July:** Estimated NSW usage to-date, reconciled periodically with hydrographic updates (meter readings).
 - **Forecast inflows:** NSW's share of forecast inflows into the River Murray System based on assumed extremely dry future conditions (includes Snowy Hydro's guaranteed inflows for the water year, and Murrumbidgee end of system flows).
 - **IVT:** Total tributary system water bought by Murray system users that is yet to be delivered.
 - **Evaporation:** Water set aside for evaporation for the remainder of the year. This reduces as the year progresses.
 - **River losses upstream of SA:** Water budgeted for transmission losses from the River Murray system upstream of the South Australian border for the remainder of the year. Generally reduces as the water year progresses.
 - **SA non-dilution entitlement:** Water to supply South Australia's entitlement flow, as required under the Murray-Darling Basin (MDB) Agreement. Generally reduces as water year progresses.
 - **SA dilution flow:** Water to provide South Australia's dilution and conveyance component of flow, as required under the MDB Agreement. Reduces as the year progresses. Note that Additional Dilution Flow (ADF) is currently triggered.
 - **MDB Agreement required reserves:** Includes conveyance reserve and minimum reserve to be set aside for use in the next water year, as required by the MDB Agreement in clause 102D and 103, respectively.
 - **Water available for allocation:** NSW's bulk share of the resource that can be assigned to NSW Murray entitlement holders based on the Water Sharing Plan. Allocation of this volume is provided in the above table and pie chart.

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
15-Aug	General Security	0.59 ML/unit share	1.10 ML/unit share*
15-Aug	Conveyance	0.3020 ML/unit share	1.00 ML/unit share*
15-Aug	High Security	0.03 ML/unit share	1.00 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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