

19 April 2022

NSW Murray and Lower Darling

Water allocation

NSW Murray regulated river water source allocations to general security entitlements reached full allocation of 110% of entitlement in October 2021. Under the water sharing plan rules, no further allocations are permitted this water year. However, since then, resources have continued to accrue in storages to support next year's opening allocations on 1 July 2022.

This statement provides a preliminary outlook of opening water availability for 2022-23. These early estimates are intended as a guide only for water users in assisting their end-of-year decisions.

With significant uncertainty in weather patterns and water users' actions for the remainder of the water year, all outlooks should be used with caution and are subject to change. The figures will be updated in mid-May, which will be the last outlook to be published prior to the announcement of 2022/23 opening allocations on 1 July 2022.

2021-22	High Security	General Security	Average Carryover
Murray	100%	110% [#]	43% [#]
Lower Darling	100%	100% [#]	2% [#]

[#] Availability of allocation on individual licences is subject to account limits as per the rules in the water sharing plan.

Storage levels* (as at 14 April 2022)

- Dartmouth Dam is 93% full – stable – holding 3,595,000 ML.
- Hume Dam is 86% full – falling – holding 2,585,000 ML.
- Lake Victoria is 61% full – falling – holding 415,000 ML.
- Menindee Lakes System is 105% full – rising – holding 1,810,000 ML.

* The NSW share of this water is approximately 36%, 45%, 39% and 37% for these storages respectively, or 39% in total (averaged across all storages).

Seasonal climate outlook

The Bureau of Meteorology's seasonal outlook for May to July indicates that rainfall is likely to be average to above average across the catchment. Day time and overnight temperatures are likely to be above average across the catchment for the same period.

The Bureau indicates that the 2021-22 La Niña is active but gradually weakening, with outlooks indicating a return to neutral El Niño-Southern Oscillation (ENSO) levels – neither La Niña nor El Niño – in late autumn or early winter. Despite weakening, La Niña may still increase the chances of wetter than median conditions for eastern Australia. The Indian Ocean Dipole (IOD) is neutral, however, outlooks indicative a negative IOD may develop in the coming months.

For full details, please visit the Bureau 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.

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 also remains open.

The normal operating range for the Murrumbidgee Inter-Valley Trade (IVT) account is between 0 GL and 100 GL, however, the use of tagged licences has pushed the balance outside of these limits. The account balance is currently about 122.9 GL. Trade **out** of the Murrumbidgee is **closed**, while trade **into** the Murrumbidgee valley is **open** (as of 14 April 2022). Water users should monitor the WaterNSW website (www.watarnsw.com.au) for daily information about the IVT account balance, the status of trade, and other information including end of season trade closing dates.

IVT in 2022/23

The IVT balance, which is effectively Murray water waiting to be delivered from Murrumbidgee storages, was spilt in November 2021 when Murrumbidgee storages were spilling. This boosted resources in the Murrumbidgee when full allocation had already been reached in the NSW Murray. It is conceivable a similar situation could arise in the 2022/23 water year.

When water physically spills from Murrumbidgee storage (including pre-release for airspace), a decision must be made to spill or retain any IVT balance. Therefore, in general:

- A decision to spill the IVT balance is likely when Murrumbidgee general security allocations are significantly behind the NSW Murray, as it provides a boost to Murrumbidgee allocations.
- A decision to retain the IVT balance, despite a Murrumbidgee storage spill, is likely when Murrumbidgee allocations are similar or better than NSW Murray, as this prevents a loss of NSW Murray resource.

Conditions will be monitored closely and any decision to spill the IVT balance in 2022/23 will be communicated to water users and markets at least 10 days before the IVT account adjustment and any implications for trade.

No further spill to the IVT account will occur this water year (2021/22). The IVT account balance on 30 June 2022 will be carried forward unchanged on 1 July 2022 into the 2022/23 water year. Water users should monitor the WaterNSW website (www.watarnsw.com.au) for information on end of season trade closing dates.

Next announcements

The next statement will be published on **Monday 16 May 2022** to update the information contained in this statement and to assist water users with end of year water management decisions.

The 16 May 2022 statement will be the final statement for the 2021/22 water year. It will provide the best estimates of expected opening water availability and allocations on 1 July 2022 for the 2022/23 water year, and the likelihood of improvement under different inflow scenarios.

Outlook for 2022-23

A preliminary water availability outlook for the start of the next water year (1 July 2022) is provided below. It is still too early for certainty with such forecasts, however, it is expected that outlooks will become more reliable as the forecast period reduces each month.

The water availability outlook for next year is indicative only, not guaranteed, and should be used

with caution, particularly when projecting many months ahead. Nevertheless, it aims to help water users with their end of year water management decisions.

Key information

- This outlook for 1 July 2022 water availability is conservatively based on assumed dry (75th percentile) inflows for the remainder of this water year and extreme dry (99th percentile) conditions for 2022-23. The resulting indicative forecast General Security allocations for September and November 2022 under a range of possible inflow scenarios are provided in the table below to assist water users to plan ahead.
- For context, NSW Murray has experienced wet conditions this water year. That is, based on long term inflow statistics, about three-quarters of years would generally experience drier conditions than those experienced this year.
- The forecast information is not guaranteed and should be used at one's own risk. It will be further updated in the mid-May water allocation statements and is expected to become more reliable as the forecast period reduces.
- Although dry conditions are conservatively assumed, significant rainfall and more inflows appear likely and may occur at any time, therefore forecasts will be adjusted monthly accordingly.
- Due to wet conditions and very low usage this water year, the maximum permissible carryover volume is assumed for the 2022-23 water year. That is, it is assumed NSW Murray General Security carryover will be around 50% of entitlement, some 838,000 ML.
- The undelivered IVT balance at the end of this water year (2021/22) will be carried over unchanged to the next water year (2022/23). The IVT balance is Murray water held in Murrumbidgee storages and is callable when needed.
- Storage in Hume and Dartmouth dams combined is about 2,400,000 megalitres (ML) higher than this time last year. These storages are shared between NSW and Victoria.
- If wet conditions persist and storages are full, allocation improvements may be stunted due to limited available airspace to capture new resource. Only when liabilities reduce, and new resource is captured, can allocations increase.
- As usual, the Barmah Choke trade balance will be re-set on 1 July and will reflect the volume of annual Snowy Savings below the choke that will not need to be delivered downstream.
- Once the commencing allocations are announced on 1 July 2022, regular assessments will be undertaken and allocation announcements made fortnightly on the 1st and 15th of each month, or the following working day, as usual, until full allocations are achieved.

Indicative allocations on 1 July 2022 for 2022/23 – Lower Darling

- The Menindee Lakes System has received significant improvement this water year. It is currently 105% full, holding about 1,810,000 ML, which is approximately 1,480,000 ML more than this time last year.
- Inflows from northern basins continue into the Menindee Lakes System.
- The Menindee resource is currently shared with other states, under the Murray Darling Basin Agreement, as the system is holding more than 640,000 ML.
- Full (100%) allocation can be expected for **towns, domestic** and **stock** access licences, and **high security** entitlements in 2022-23.
- Full allocations for **supplementary** access licence holders can be expected and is available subject to announced periods of supplementary access.

- Full (100%) opening **general security** allocation can be expected based on high storage volumes.
- Given high storage volumes, **carryover** in accounts will be replaced by full allocations on 1 July.
- The Wentworth to Broken Hill pipeline is operational and supplying Broken Hill's water supply from the Murray. Therefore, allocation for the town water supply licence associated with the pipeline will be governed by NSW Murray town water supply allocation.

Indicative allocations on 1 July 2022 for 2022/23 – NSW Murray

- Full (100%) allocation can be expected for **towns, domestic** and **stock** access licences, and **sub-category high security** entitlements.
- Full allocations for **supplementary** access licence holders can be expected and is available subject to announced periods of supplementary access.
- Forecasts show likely 97% allocation for **high security** entitlements.
- Full general security **carryover** is expected to be available, some 838,000 ML, on 1 July.
- **Conveyance** is expected to be allocated in accordance with water sharing plan rules, commensurate with high security and general security allocations.
- Forecasts indicate sufficient resource to provide a likely commencing **general security** allocation of around 30% of entitlement.
- The current Barmah-Millewa Environmental Water Allowance (BMEWA) account balance is approximately 211,000 ML. In accordance with the water sharing plan, the balance will be fully borrowed on 1 July 2022, with payback occurring when general security allocations reach 30%.
- With the forecast indicating a commencing allocation of 30% to general security, further increases to general security can occur once the BMEWA account is fully paid back. Once the BMEWA is paid back, general security allocations will recommence, subject to resource improvements.
- Water can be expected to be set aside for environmental requirements in accordance with the rules of the NSW Murray and Lower Darling regulated rivers water sharing plan.

Chances of improvement

The chances of improved NSW Murray general security allocations after 1 July 2022, based on a repeat of historical inflows, are provided in the table below under a variety of conditions. The forecast is based on all available historical data, which gives a more realistic outlook in the current conditions than using just the driest years on record (dry tercile).

It is important to note that these estimates are indicative improvements only and are not guaranteed allocations. Estimates may change based on weather variability, water user behaviour, water management decisions and other events. This means water users should use this information with caution and at their own risk, particularly as it projects many months ahead.

Forecast general security allocations (%)

(Any carryover water can be added to these indicative allocations)

Repeat of historical inflow conditions	1 Sep 2022	1 Nov 2022
99 chances in 100 (extreme) (99%)	30%	30%
9 chances in 10 (very dry) (90%)	30%	34%
3 chances in 4 (dry) (75%)	30%	48%

1 chance in 2 (mean) (50%)	38%*	110%
1 chance in 4 (wet) (25%)	47%*	110%

Note 1: Estimated values indicative only, not guaranteed and subject to change based on actual events unfolding.

Note 2: Statistical values reflect NSW share of inflows, not whole of system inflows.

Note 3: Forecast assumes 50% general security carryover.

Note 4: Forecast incorporates Murrumbidgee regulated end of system flows.

Note 5: Assumes BMA payback commences once general security allocations reach 30% as per the water sharing plan.

* Potential storage spills resulting in limited allocation improvement.

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