



For the two weeks ending Wednesday, 01 Jan 2025

Trim Ref: D25/31

Rainfall and inflows

Parts of the northern Basin received moderate rainfall in the last 2 weeks, with around 25 to 50 mm recorded, while the southern Basin remained largely dry with very little rainfall observed. Falls of 1 to 5 mm for parts of the upper Murrumbidgee, upper Murray and Victorian tributary catchments were observed but resulted in little streamflow response. See the Bureau of Meteorology's 8-day rainfall outlook for a forecast of the coming week's rainfall.

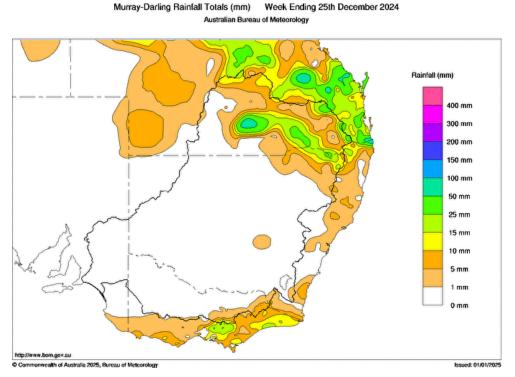


Figure 1 - Murray-Darling Basin rainfall for the week ending 25 December 2024





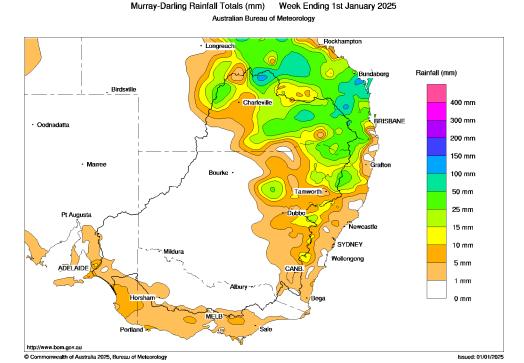


Figure 2 - Murray-Darling Basin rainfall for the week ending 1 January 2025

River operations

- Releases increase from Hume Dam to meet increasing demands as hot and dry weather persists
- Water quality improving as inflows from the Northern Basin reach the Menindee Lakes
- Risk of delivery shortfall remains low for the coming week

River Murray System update

Releases from Hume Dam remained higher this week as hot and dry weather conditions continued, and irrigation demand remained high. In late December, the MDBA resumed calling water at Weir 32, as well as in the Goulburn to help meet demands in the Murray and reduce the risk of shortfall. This IVT call is expected to continue throughout January if the weather remains hot and dry.

The Murray–Darling Basin Authority (MDBA) reminds river users that River Murray levels downstream of Hume Dam to South Australia may vary. Stakeholders are encouraged to review our <u>River Murray Data</u> website and the weekly report to keep up to date with current flows and river levels over the coming weeks.

The MDBA has released its end of October update to the <u>Annual Operating Outlook</u>. This outlook outlines how the MDBA expects to operate the River Murray System for the rest of the water year under a range of inflow scenarios.

Water demand

The MDBA continues to actively monitor shortfall risks. A shortfall occurs when water cannot be delivered to users when and where it is needed. A *delivery shortfall* occurs when actual water use downstream is higher than it was forecast to be when river water was released from storages, weeks earlier, to meet the forecast needs for irrigation and environmental water. A *system shortfall* occurs when the combined capacity of the system is unable to supply all downstream requirements over the full season. More information about shortfalls can be found at <u>Water demand and shortfalls</u> | Murray—Darling Basin Authority (mdba.gov.au).





The risk of a *delivery shortfall* in the River Murray between Wakool Junction and the SA border over the coming week is low. The MDBA is continuing to monitor weather conditions and forecast demands and will continue to actively manage the risk of delivery shortfall across the high demand summer-autumn period as conditions evolve.

The risk of a **system shortfall** is currently negligible. With the Menindee Lakes available as a shared resource, transfers from Hume to meet lower system demands are unlikely to be required until March.

The MDBA, Basin state governments and their agencies have different roles and responsibilities in managing delivery shortfalls. Read more information on <u>delivery shortfall risks for Victorian water licence holders</u>.

Water Quality

NSW DCCEEW <u>advise</u> that dissolved oxygen levels are improving as water begin arriving in Lake Wetherell. While management options are limited, agencies are working together to best manage these flows to maintain water quality.

<u>WaterNSW</u> advises red alerts for blue-green algae (BGA) along the Darling River at Wilcannia and Caulpaulin. Most sites in the Menindee Lakes are under various amber/green alerts with a red alert at the Lake Menindee outlet and in Lake Wetherell (Site 2). The whole Lower Darling (Baaka) is under various amber or green alerts with red alerts at Tolarno, Pooncarie and Ellerslie. The Great Darling Anabranch is under red alert at Silver City Highway. In the River Murray, there are numerous BGA amber or green alerts from Lake Hume to the SA border, with most sites in the Edward-Wakool at amber or green alert levels.

Victoria's <u>Goulburn–Murray Water</u> has issued BGA warnings at Lake Eildon, Torgannah Lagoon, and Murray Valley Irrigation Area 3-5 Channel/spurs. There are no current BGA alerts in SA (<u>SA Health</u>).

Parts of the Menindee Lakes and Lower Darling (Baaka) are also experiencing elevated salinity.

Further general information is available at Water quality threats | Murray-Darling Basin Authority (mdba.gov.au).

River operations

Over the last two weeks MDBA active storage volume reduced by 151 gigalitres (GL) to 5,733 GL, or 67% capacity.

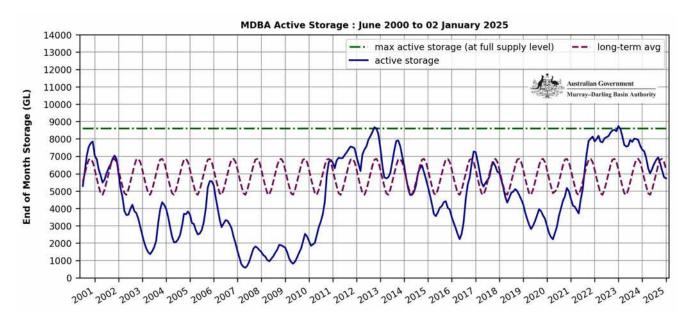


Figure 3 - MDBA Active Storage (Source: MDBA)





At **Dartmouth Reservoir**, the <u>storage</u> reduced by 14 GL to 3,418 GL (89% capacity) over the last two weeks. The release, measured at the Colemans gauge, decreased during the fortnight from around 2,800 megalitres per day (ML/day) to 1,700 ML/day. This is the recession from a small managed pulse down the Mitta Mitta River. Higher flow rates improve water quality in the river, while also increasing the volume transferred to Hume Dam. This increased flow rate is expected to remain around 1,700 ML/d over the coming week before another water quality pulse is delivered in January.

Hume Reservoir storage reduced by 173 GL to 1,625 GL (54% capacity). The release from Hume Dam is currently at 15,000 ML/day. Dam releases have increased throughout the fortnight in response to irrigation demands. The release from Hume Dam is expected to continue to increase over the coming weeks if conditions remain hot and dry.



Flows in the Ovens River continue to recede following the heavy rainfall in recent weeks. Flow at Peechelba, the last gauging station before flowing into the River Murray upstream of Lake Mulwala, is around 1,000 ML/day. Lake Mulwala is sitting within the normal operating range (124.6 to 124.9 m AHD) and is currently 124.83 m AHD. The water level is expected to remain within the normal operating range over the coming week.

Figure 4 - River Murray at Albury, New Years Day 2025 (Source: M. Todhunter)

At **Yarrawonga Weir**, irrigation demands increased over the last two weeks in response to continued hot and dry conditions. Demands at Murray Irrigation Limited increased from 4,200 ML/day to a peak of 6,300 ML/day and Yarrawonga Main Channel varied from 800 ML/day to around 1,750 ML/day. Releases from Yarrawonga Weir remained steady at 8,500 ML/day.

Downstream on the River Murray, the staged closing of regulators through the **Barmah-Millewa Forest** continued as part of the Barmah-Millewa Forest Fish Exit Strategy. The forest regulators are shut in a specific order and timing to cue native fish to leave the forest and reduce the risk of fish being trapped on the floodplain. There are four regulators still to be shut. Flow remained relatively steady over the week through the **Kolety** (pronounced Koletch)/**Edward River offtake**, which averaged around 1,500 ML/day, and flow through the **Gulpa Creek** offtake reduced from around 550 to 400 ML/day.

Downstream at **Steven's Weir**, flows increase from 1,500 ML/day to around 2,100 ML/day. The flow is likely to vary over the coming week depending on weather conditions and irrigation demand.





Inflow to the Murray from the **Goulburn River**, measured at McCoy's Bridge, is currently 1,200 ML/day. The Murray–Darling Basin Authority's call of water from the Goulburn Inter-Valley Trade (IVT) resumed in late December to supplement flows in the Murray and reduce shortfall risk. Information regarding opportunities for allocation trade between the Goulburn and Murray systems is available at the Victorian Water Register <u>website</u> and the Goulburn-Murray Water website.



The flow downstream of Torrumbarry Weir decreased to around 5,700 ML/day over the last two weeks and is expected to increase slightly in the coming week as inflows from the Goulburn arrive. The diversion to National Channel increased to 1,700 ML/day and remained steady throughout the fortnight. Further down the river, Swan Hill flow reduced from 9,200 ML/day to around 5,400 ML/day throughout the last two weeks. Flows at Swan Hill are forecast to continue to recede in the coming weeks.

Figure 5 - Lock 11 (Source: T. Milne)

On the **Murrumbidgee River**, the flow at <u>Balranald</u> reduced from 1,200 ML/day to around 800 ML/day. Trade to the Murrumbidgee is closed, with the <u>Murrumbidgee IVT</u> account balance currently 0.9 GL. Trade to the Murray from the Murrumbidgee is open.

The flow downstream of **Euston Weir** gradually decreased during the last two weeks. Flows decreased from around 13,700 to 5,500 ML/day and are forecast to continue to recede gradually over the next week.

Storage in the **Menindee Lakes** increased to 709 GL (41% capacity). Inflows from rainfall in the northern Basin have begun to arrive at Lake Wetherell, and <u>WaterNSW are forecasting</u> 300 to 400 GL of inflows to arrive by early February 2025.

The release from the Menindee Lakes, measured at **Weir 32**, is currently around 750 ML/day. With hot and dry weather continuing in the southern basin, MDBA resumed its call on water at Weir 32 to help meet demands and reduce shortfall risk in the Murray. It is possible that if hot and dry conditions persist MDBA will increase its call on Menindee.

The MDBA continues to work with WaterNSW, the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) and NSW DPI Fisheries to support active management of the lakes until they reach the 480 GL storage trigger. At the current time it is anticipated this could occur in autumn 2025, depending on demands and inflows. More information can be found in this <u>WaterNSW Community Update</u>.







The <u>storage</u> at **Lake** Victoria increased by 4 GL over the last two weeks to around 655 GL (97 % capacity). The Lake Victoria storage volume peaked near the full supply level (98%) on Boxing Day. Storage volume and operations at Lake Victoria are being managed in accordance with the Lake Victoria Operating Strategy (LVOS) as specified in the Objectives and **Outcomes for River** Operations in the River Murray System.

Figure 6 - River Murray on Christmas Day at Trentham Cliffs (Source: T. Milne)

The **flow to South Australia** averaged around 7,900 ML/day over the last two weeks. Flow is expected to increase slightly over the coming week.

The **Lower Lakes** 5-day average water level is approximately 0.725 m AHD. For further information about water levels, flow rates and barrage operations along the River Murray in South Australia see the South Australian Department for Environment and Water weekly <u>River Murray Flow Report</u> and the <u>Water Data SA</u> website.

For media inquiries contact the Media Officer on 02 6279 0141

JACQUI HICKEY Executive Director, River Management









Water in Storage

Week ending Wednesday 01 Jan 2025

MDBA Storages	Full Supply Level	Full Supply Volume	Current Storage Level	Current	Storage	Dead Storage	Active Storage	Change in Total Storage for the Week
	(m AHD)	(GL)	(m AHD)	(GL)	%	(GL)	(GL)	(GL)
Dartmouth Reservoir	486.00	3 856	479	3418	89%	71	3347	-7
Hume Reservoir	192.00	3 005	184	1625	54%	23	1602	-92
Lake Victoria	27.00	677	27	655	97%	100	555	-8
Menindee Lakes		1 731*		709	41%	(480) #	229	47
Total		9 269		6407	69%	-	5733	-59
Total Active MDBA Storage 67%^								

^{*} Menindee surcharge capacity - 2050 GL

Major State Storages

NSW: https://www.waternsw.com.au/supply/regional-nsw/dam-levels
VIC: https://www.g-mwater.com.au/water-resources/catchments/storages

Major Diversions from Murray and Lower Darling (Baaka).

NSW: WaterInsights - WaterNSW

VIC: Water Measurement Information System

Snowy Mountains Scheme

Snowy diversions for week ending 31 Dec 2024

Storage	Active Storage (GL)	Weekly Change (GL)	Diversion (GL)	This Week	From 1 May 2024
Lake Eucumbene - Total	1857	0	Snowy-Murray	6	590
Snowy-Murray Component	706	-3	Tooma-Tumut	0	125
Target Storage	1520		Net Diversion	6	465
			Murray 1 Release	4	710

Flow to South Australia (GL)

^{*} Flow to SA will be greater than normal entitlement for this month due to environmental flows.

217.0*	
51.3	(7,300 ML/day)
6.8	
336.3	
	51.3 6.8

Salinity (EC)

List view | River Murray data (mdba.gov.au)

River Levels and Flows

List view | River Murray data (mdba.gov.au)

SA Water – River Murray reports

 $\underline{https://www.sawater.com.au/water-and-the-environment/south-australias-water-sources/river-sources/river-reports-daily-flow-linear-sources/river-sources/river-reports-daily-flow-linear-sources/river-sources/river-reports-daily-flow-linear-sources/river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-river-reports-daily-flow-r$

Water Data SA - Barrage flow summary

https://water.data.sa.gov.au/Data/Dashboard/41

State Allocations (as at 01 Jan 2025)

NSW State Allocations (%)

Location	High Security	General Security
Murray Valley	97	53
Murrumbidgee Valley	95	34
Lower Darling (Baaka)	100	100

VIC State Allocations (%)

Location	High Reliability	Low Reliability
Murray Valley	100	0
Goulburn Valley	100	0

SA State Allocations (%)

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Location	High Security	
Murray Valley	100	

NSW: https://www.industry.nsw.gov.au/water/allocations-availability/allocations/summary

VIC: http://nvrm.net.au/seasonal-determinations/current

SA: https://www.environment.sa.gov.au/topics/river-murray/water-allocation







^{**} All Data is rounded to nearest GL **

[#] NSW has sole access to water when the storage falls below 480 GL. MDBA regains access to water when the storage next reaches 640 GL.

^{^ %} of total active MDBA storage

Week ending Wednesday 01 Jan 2025

