Water Outlook

2025 - 2026

LOWER MURRAY WATER

Acknowledgement of Country

(Artist, Tobie Cameron)

Lower Murray Water (LMW) acknowledges the Traditional Owners of the land on which we work and reside. We recognise their continuing connection to land, waterways, and community. We pay our respects to Elders' past, present, and future.

The Traditional Owners groups within LMW's service region lie within the traditional lands of First Nations Peoples, from upstream at Koondrook moving downstream along the Murray River through to the western edge of our region at the South Australian border. They are the Barapa Barapa Peoples, Wemba Wemba Peoples, Wadi Wadi Peoples, Tatti Tatti Peoples, Latji Latji Peoples, Nyeri Nyeri Peoples, Ngintait Peoples and the Wegaia Peoples.

The First Nation People's connection to land and water is the living cultural knowledge that is passed down from generation to generation. The stories that connected the ancestors to their culture still live through the First Nations Peoples of today.

Acknowledgement of Country written by Stephanie Sloane

Stephanie works at LMW as a Diversity and Inclusion Officer. She is a proud Ngiyampa woman and has a strong connection to her culture, history and the land. Stephanie has brought not only her experience and passion for people to this role but also a commitment to inspire and mentor others wishing to pursue a career at LMW.

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Water Outlook 2025-26

At a glance. (as of 21 October 2025)

Seasonal determinations as of 15 October 2025

Murray system – 90% HRWS 0% LRWS

Goulburn System – 54% HRWS 0% LRWS

Dam storage

Dartmouth Dam

- Oct 21 capacity: 75%
- 2023-24 capacity 96%

Hume Dam

- Oct 21 capacity: 51%
- 2023-24 capacity: 62%

Urban demand is expected to increase gradually, and rural demand will remain relatively constant

Figure 1 – Forecast Volumetric Urban Demand

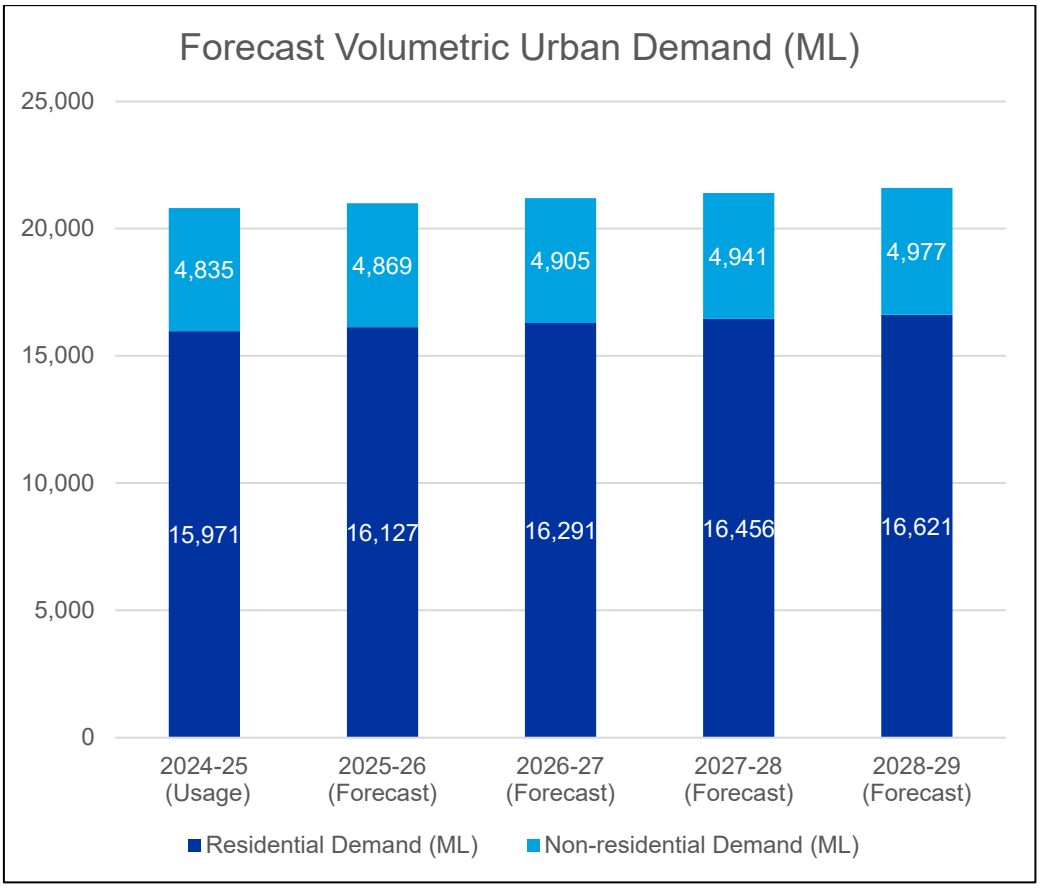


Table 1 – Per Capita Daily Consumption by Average LMW Residential Customer

Per Capita Daily Consumption for LMW Operations	
Year	**Litres per day**
2024-25	564
2023-24	514
2022-23	438
2021-22	533
2020-21	545

Table 2 – Supply Strategy

Strategy	LMW actions to balance Supply and Demand
Increase Supply Availability	– Continuing the purchase of additional water share to secure supply levels
Reduce demand for water	– Deliver the Community Housing Retrofit Program – Enforce Permanent Water Saving Rules – Always watering your garden using a leak-free hose with a trigger nozzle. – Sprinklers and drippers can only be used before 10am and after 6pm. – Don't hose concrete, paths or driveways - use a broom instead. – Fountains and water features must recirculate water. – Undertake Community Education
Heightened awareness and compliance	– Deliver School Education Programs – Community interaction - Public information and water-wise events. – Water use compliance and enforcement, along with awareness and advertising to remind water saving rules and limit the usage
Water Efficiency	– The Sunraysia Water Efficiency Project (SWEP) funded by State and Commonwealth governments is now complete, which will reduce water losses in the Mildura, Merbein and Red Cliffs irrigation districts.

Summary

LMW's service area extends from Kerang to the South Australian Border, spanning the municipalities of Mildura, Swan Hill and Gannawarra.

The Annual Water Outlook for 2025-26 provides an outlook until June 2026 on security of water supply to LMW's urban and rural customers, which is almost entirely delivered from the Murray River Regulated System.

Table 3 below summarises the details of the urban & rural water supply systems and the level of security of supply for 2025-26.

Table 3 – Water supply systems and levels of security

System	Urban / Rural	Towns Supplied	Supply Sources	Level of Restrictions	Likelihood of Restrictions*
Mildura	Urban	Mildura and Merbein	River Murray (97%) Loddon River, Goulburn Murray Water (GMW) Channels (3%)	PWSR has been the restriction level since June 2020	Very Rare <1% No likelihood of introducing LMW's DPP.
Red Cliffs		Red Cliffs			
Robinvale		Robinvale			
Piangil		Piangil			
Swan Hill		Swan Hill, Nyah, Nyah West, Lake Boga and Woorinen South			
Kerang		Kerang			
Koondrook		Koondrook			
Murrabit		Murrabit			
Millewa	Rural	Millewa	River Murray (100%)	None	None. No likelihood of introducing LMW's DPP.
Merbein		Merbein, Yelta			
Mildura		Mildura			
Red Cliffs		Red Cliffs			
Robinvale		Robinvale			

* Likelihood of water restrictions range: very rare <1%; rare 1-4%; unlikely 5-19%; possible 20-49%; likely 50-79%; almost certain 80-100%.

As shown in Table 3, LMW has a very rare likelihood of enforcing water restrictions on our customer base and would not need to enact LMW's Drought Preparedness Plan (DPP). Due to the drier conditions in the 2024–25 water year, no allocations were made for LRWS entitlements in the Victorian Murray system and the Murray system's HRWS determination took longer to reach full allocation in the 2024–25 season than in the previous year.

The southern Murray-Darling Basin experienced predominantly below-average rainfall through most of 2024–25, particularly during winter and early spring. While there were occasional rainfall events, such as a localized event in the Mid-Murray in January 2025, they were not sufficient to sustain overall high inflows throughout the basin.

This contrasts with the conditions in 2023 when a wetter period helped boost inflows. Inflows were low for most of the year, leading to a significant drawdown in storages. Between July 2024 and June 2025, the volume in southern MDB storages fell by 31%.

The MDBA maintained in its August 2025 Annual Operating Outlook that the risk of a delivery shortfall during the 2025–26 water year was low, but it has not been eliminated.

The risk is continuously monitored, especially during periods of high demand and heat and there is no situation expected where LMW's DPP would be initiated.

In addition, the urban water shares purchased in compliance with the Urban Water Strategy 2022 will ensure the security of supply of water to urban customers in 2025-26. Given the current resource levels and forecasts, the probability of restrictions in our water supply systems is unlikely this year (Table 3).

In our systems, we expect to have 100% allocation for 2025-26. However, there is uncertainty in future water years. LMW will continue to apply PWSR in urban water supply systems. LMW is aware that there are still risks such as higher demand due to the warmer climatic conditions (Bureau of Meteorology forecasting a drier climatic outlook until February 2026), raw water quality issues, emergency situations, asset failure, which could result in the need for escalation and future water years allocations may be impacted.

In 2024-25, the total volume of potable water supplied to our water districts was 20,646 ML and the total number of customer connections was 35,589. The total volume of water supplied to irrigation district and Millewa waterworks district customers was 136,892 ML.

To ensure continuity of service delivery, LMW has several initiatives which include the "Operational Summer Readiness Program' to ensure that all critical assets are capable of delivering their function during peak summer demand periods. Our emergency management plan and DPP includes contingency and response plans for Blue Green Algae, and Drought, LMW also undergoes proactive capital renewal programs to rehabilitate or replace critical water and irrigation mains along with the rehabilitation of network sewer assets.

LMW will also continue with programs to reduce usage including Compliance and Enforcement activities, Community Housing Retrofit Program and undertaking community education will help customers to conserve water and encourage the efficient use of water.

Our Service Region

Lower Murray Water is one of the few hybrid water utilities in Victoria and is the most remote water corporation from Melbourne, combining an urban water business with an irrigation water business, plus other support functions delivered for private diverters and the Mallee Catchment Management Authority. We have around 230 staff to provide services to approximately 76,000 urban customers, 5215 irrigation, stock, and domestic customers, and 1113 private diverters.

LMW's Services

LMW provides several services across the north-west of Victoria, but our core business is centered on providing:

- Potable drinking water in the urban and regional centers.
- Wastewater collection and treatment services to the urban and regional centers.
- Irrigation water supply and irrigation drainage services.
- Management of private diversion licenses.
- Domestic and stock water supply to rural areas; and
- Reclaimed water re-use.

Figure 2 below shows the service area of LMW, which includes regional centers and towns within three local government areas. They are Mildura Rural City Council, Swan Hill Rural City Council, and Gannawarra Shire Council.

Figure 2 - LMW's service region

Table 4 below shows the connection numbers and volume of potable water supplied to each water supply system in 2024-25.

Table 4 - Total number of customer connections across LMW districts – Urban

Town	Number of Urban customer Connections	Volume of potable water supplied (ML)
Kerang	2,195	1003
Koondrook	545	231
Lake Boga	510	284
Mildura	22,495	13810
Murrabit	57	26
Mystic Park	15	9
Nyah	350	228
Nyah West	296	162
Piangil	122	129
Red Cliffs	1,830	1183
Robinvale	1,028	567
Swan Hill	5,965	2896
Woorinen South	176	119
Total	**35,589**	**20,646**

Table 5 shows the volume of water delivered to our rural customer in 2024-25

Table 5 - Volumes of water delivered to Rural districts in 2024-25

District	Primary Entitlement holders (ML)	Private Diverters (ML)
Mildura	37,034	521,053
Merbein	20,897	
Red Cliffs	34,167	
Robinvale	21,531	
Millewa (and Lake)	23,263	
Total	**137,252**	**521,053**

745 megaliters of water use was recorded by the Victorian Environmental Water Holder entitlements associated with LMW. LMW manages a variety of short-and long-term risks to its urban and rural water supplies.

Table 6 summarises the risk ranking and a comparison of risks with the previous year.

Table 6 - Risks (perceived) to the urban and rural supply over the next 12 months

Risk	Risk Assessed Score (24-25)	Risk Assessed Score (25-26)
Water Availability	5	4
Water Quality - Blue Green Algae (BGA) & Plumatella	4	5
Emergencies like floods, bushfires, resulting damages, service interruptions and higher demands	5	3
Urban growth and Supply demand	5	3
Infrastructure resilience	5	4

Note that Risked Assessed Score 1 and 5 correspond to highest and lowest risk, respectively. These Risked Assessed Scores represent a 'point in time' and highlight some immediate areas for attention within LMW's operational planning and development of longer-term strategies.

Water availability is the key risk to rural water supply, which is highly dependent on climate. LMW and the customers are taking actions to adapt to climate change and reduce water use such as implementing efficient irrigation systems and reducing losses in water transfer systems

With the predicted hot climatic conditions during summer, Blue Green Algae (BGA) outbreaks in the Murray River system could be initiated. This is still one of the key issues to ensuring water supply to our communities. Significant operational interventions are required to produce compliant drinking water during BGA bloom events. During BGA bloom periods, rural stock and domestic customers are advised not to use the water as a precautionary measure to minimise the risk.

Infrastructure resilience remains one of the focus areas for both urban and rural water supply. LMW is undertaking several actions such as improvements in asset maintenance, asset renewals and augmentations to improve infrastructure resilience and cater to future demands and urban growth. Our Water Plan 5 has been approved by the Essential Services Commission (ESC) in 2023, and we are working towards delivering the projects to improve our infrastructure and streamline our service delivery.

Current water resource position

Urban Water Supply Systems

Mildura

Water is pumped from the River Murray at Mildura through two conventional water treatment plants (WTP). The treated water is supplied to 22,495 connections in the City of Mildura and surrounding rural residential areas including the townships of Merbein, Cabarita, Birdwoodton, Irymple, Nichols Point, Koorlong and Cardross. The Seventh Street treatment plant has a capacity of 74 ML/d, and the Mildura West plant has a capacity of 18 ML/d.

The current average daily consumption is approximately 51 ML/d, with a current estimated peak day consumption of 77 ML/d. Treated water pumping stations at Seventh Street and Mildura West distribute water to two water towers with a combined storage capacity of 3.0 ML. Additional booster pump stations at Ginquam and Benetook and ground-level storages with a combined storage capacity of 37.2 ML allow the system to maintain pressures in the outlying areas on high-demand days.

Merbein is supplied with treated water from Mildura (both MDA Seventh Street and MDA West WTP) via a 450 mm diameter transfer pipeline 7.14 km long. The pipeline transfers water directly to the Merbein reticulation, including ground-level storage of 7.5 ML capacity. During high demand, booster pumps of 150 L/s (13 ML/d) capacity can be operated to maintain optimum pressures and flows in the reticulation network. There is no current situation expected that would require LMW to initiate our DPP.

Red Cliffs

The town of Red Cliffs (14 km south of Mildura) is an independent system and services around 1,800 connections. A raw water pumping station extracts water from the river Murray and supplies it to a dissolved air flotation and filtration treatment plant. The treated water is stored in a 6 ML ground-level storage tank (GLS). The plant capacity is 11 ML/d, and the average day demand is approximately 3.6 ML/d with a current estimated peak day consumption of 9.2 ML/d. From the GLS the treated water is delivered to a water tower near the town center via two rising mains of 300 mm and 375 mm in diameter and supplied to the town. This system is to be replaced in the upcoming 12 months with a new pumping station supplying pressure and volume to Red Cliffs through a new 375mm rising main. This pressurised system will replace the current 100-year-old elevated tank in the center of Red Cliffs that supplies pressure to the Red Cliffs community. There is no current situation expected that would require LMW to initiate our DPP.

Robinvale

At Robinvale, raw water is pumped from the River Murray via a 300 mm pipeline to a conventional water treatment plant, which services around 1,000 connections. Treated water is pumped to a 0.9ML standpipe from a 3.6 ML ground storage tank. The reticulation network is supplied by the 0.3 ML standpipe and a set of booster pumps. The maximum plant design capacity is 6 ML/d, with an average peak daily consumption during the summer months of approximately 5.0ML/d. There is no current situation expected that would require LMW to initiate our DPP.

Kerang

Kerang is situated at the southern end of the LMW region. Raw water is pumped either from the river Murray (at Koondrook) or the Goulburn Murray Water 14/2 Channel and treated in a conventional treatment plant, which services around 2,200 connections. LMW can extract water from the Loddon River in the event of an emergency with a temporary pipework arrangement, however it is not preferred due to poor water quality.

The treated water is pumped via dual rising mains of 400mm diameter to Nolan Street which supplies the reticulation network with a 0.68 ML water tower and a 2.5 ML ground storage tank. During high demand, water can be supplied from the ground storage tank via a booster pump station to maintain optimum pressures and flows in the reticulation network. The maximum plant design capacity is 11 ML/d and the average peak daily consumption reached 7.2 ML/d during summer periods. There is no current situation expected that would require LMW to initiate our DPP.

Piangil

At Piangil, raw water is pumped from the river Murray to a “Package” conventional water treatment plant which services around 120 connections. The plant has a capacity of 1.0 ML/d. Treated water is then pumped to a 1.14 ML ground storage tank, situated on a high ridge east of the town. The system is re-pressurised by pressure booster pumps for distribution into the town’s reticulation network from this storage tank.

In 2021-22, a new water main was constructed (225 mm PE, 1.2 km long) as the old AC (Asbestos Cement) main was approaching the end of asset life and had multiple leaks/ failures. This enabled LMW to provide an increased volume of water supply with increased pressure (from 180 – 240 kPa). There is no current situation expected that would require LMW to initiate our DPP.

Koondrook

Raw water is pumped from the Murray River to a conventional water treatment plant with a capacity of 3 ML/d, which services around 550 connections. Treated water is pumped to a 0.9 ML standpipe from a 2 ML ground storage tank. The Koondrook reticulation network is supplied by a standpipe. There is no current situation expected that would require LMW to initiate our DPP.

Murrabit

The Murrabit system can pump raw water from the Raw Water Storage, which is fed from the Goulburn- Murray Water channel or directly from the Murray River to a “Package” conventional water treatment plant with 0.4 ML/d capacity, which services around 50 connections. Treated water is pumped into 1 x 50 KL elevated storage tank from 4 x 50 KL ground storage tanks. The Murrabit reticulation network is supplied from the tower. There is no current situation expected that would require LMW to initiate our DPP.

Swan Hill

Raw water is pumped from the River Murray at Swan Hill to a conventional water treatment plant with a capacity of 32 ML/d. The Swan Hill system also supplies Woorinen South, Nyah & Nyah West, and Lake Boga, which together service around 7,300 connections. The average daily consumption is 9.8 ML/d for this system. Treated water

pumps deliver treated water to a 2.3 ML ground-level storage and a 0.68ML water tower near the city center. Two ground-level storages, each of 4.0 ML capacity, and a 0.15 ML water tower are situated west of the city. A new 5 ML storage facility has also been recently constructed at this storage site and is operational as of March 2022.

Woorinen South is supplied from the Swan Hill system via a 10 km long pipeline with 300 mm and 250 mm diameter sections with a 2.0 ML ground level storage tank and associated re-lift pumps and chlorination facilities.

The townships of Nyah and Nyah West are supplied via a 27 km long, 250mm diameter pipeline from the Swan Hill Water Treatment Plant. A 6.5 ML ground-level storage tank, chlorination facility, and re-lift pumps are situated at Nyah. Properties adjacent to this pipeline can access water for domestic or commercial supply.

Lake Boga is supplied via a 250 mm diameter pipeline from the Swan Hill Water Treatment Plant. A 0.9 ML ground level storage, chlorination facilities, relift pumps, and a 0.08 ML water tower. There is no current situation expected that would require LMW to initiate our DPP.

Sources of supply

LMW draws 97% of raw water from the Murray River with the remaining from Goulburn Murray Water's irrigation channel systems. A bulk water entitlement of 30,971ML is currently specified under the Bulk Entitlement (River Murray - Lower Murray Urban and Rural Water - Urban) Conversion Order 1999 as of June 2011.

LMW supplements the bulk entitlement with purchases of additional water share and holds 2,222.6ML High-Reliability Water Shares (2612.9ML Murray and 550ML Goulburn), and 216ML of Low-Reliability Goulburn Water Shares as of 15th October 2025.

In 25-26, the opening allocation for High-Reliability Water Shares (HRWS) was 39% in the Murray system and 31% in the Goulburn system.

The total opening volume of available water to LMW was 13,268.3 ML, with a carryover volume of 926.5 ML on July 1, 2025).

Table 7 summarises the availability of water as per the seasonal determinations.

Table 7 - Availability of water to LMW in 2025-26 at October 2025

Source of water	Entitlement/ Share (ML)	Seasonal Determination on 1 July 2025	Seasonal Allocation issued	Seasonal determination on 15 October 2025	Available balance as of 15 October 2025
Goulburn HRWS	550	31%	170.5	54%	297
Goulburn LRWS	216	0%	-	0%	0
Murray HRWS	2,613	39%	1,019.1	90%	2,351.7
BE (Urban)	30,971	39%	12,078.7	90%	27,873.9
Carryover	-	-	926.5	-	926.5
Total (ML)	**34,350**	**-**	**14,194.8**	**-**	**31,449.1**

1. Carryover as of the start of the season (1 July 2025)
2. Net trade Vol = trade in - trade out. Negative volume indicates trade out.
3. The volume of water write-off was from the spillable water account, which does not impact the water available.
4. The volume includes permanent water shares purchased by LMW since 30th September 2023.

Rural Water Supply Systems

LMW services 2666 irrigation and 2240 stock and domestic customers in the four pumped irrigation districts of Mildura, Merbein, Red Cliffs and Robinvale, and to 297 Millewa waterworks district customers and 12 Yelta waterworks district customers. Raw water is drawn from the Murray River via several offtake pump stations and distributed to the customers via combination of channels and piped transfer networks except for Robinvale Irrigation District, which is supplied through a pressurised piped system.

Current Demand and Forecast (Urban)

Table 8 below shows historical volumetric urban water usage from 2021-22 to 2024-25 and water use forecast up to 2028-29. The forecast is based on average climatic conditions in the last 3 years with an average annual demand of 528kL per residential connection expected. This assumption is consistent with the LMW 2022 Urban Water Strategy (UWS)

Table 8 - Urban Water Volumetric Usage and Demand Forecast – ML pa 2021-22 – 2028-29

	Usage				Forecast Usage			
	2021-22	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Predicted Usage	15509	15661	15815	15970				
Residential Demand (ML)	14,398	12,160	14,371	15,971	16,127	16,291	16,456	16,621
Non-residential Demand (ML)	4,396	3,987	4,559	4,835	4,869	4,905	4,941	4,977
Total potable water demand	**18,758**	**16,147**	**18,930**	**20,807**	**20,996**	**21,196**	**21,397**	**21,598**

Usage during 2024-25 showed a significant increase in water consumption from prior years which is attributed to the dry seasonal conditions and high-water availability. This increase was accounted for in future predictions.

The forward climatic outlook by BoM (Bureau of Meteorology) predicts warmer conditions this season with rainfall below the mean rainfall levels.

Therefore, the demand for water will likely remain high with the community required to comply with the PWSR to help manage demands.

It is difficult to accurately predict water savings achieved through restrictions during a single season and across a large population base such as Mildura. Further, demand due to the growth in population and activities in the region will result in higher demand in the future.

The level of water usage depends on several factors such as temperature, rainfall, and customer behavior.

Water restrictions offer public guidelines on water use but do not necessarily have a significant impact, particularly when the restriction is at a low level such as Stage 1. There is no current situation expected that would require LMW to initiate our DPP.

Current Demand and Forecast (Rural)

Table 9 shows the volume of water supplied to irrigation districts. As can be seen from the historical water usage data, rural demand can fluctuate year on year depending on climate conditions.

No new irrigation district off-take points were agreed to or used in the last 3 years. However, spare capacity created due to the Sunraysia Modernisation Project and through the augmentation of networks through Sunraysia Modernisation Project 2, volumes will increase for rural customers in Red Cliffs and Merbein irrigation districts over the coming seasons.

The current dry climate outlook with less rainfall suggests that high water use for rural customers is expected for the rest of the 2025-26 season. The estimated delivery to the Primary Entitlement Holders is 125,000-145,000 ML.

Table 9 - Volume of water supplied to rural customers

Year	Volume of water supplied to LMW Rural Customers (ML)	Volume of water supplied to VEHW(ML)
2024-25	137,252	745
2023-24	115,301	374
2022-23	100,706	-
2021-22	116,564	118
2020-21	117,809	922
2019-20	117,511	1,608
2018-19	129,348	1,561

Climate Conditions and Outlook

Recent conditions

Mean maximum temperatures in September were above to very much above average for most of the south and parts of the north-west of the state, and close to average for the rest of the state. Victoria's area-averaged mean maximum temperature was 17.33 °C, 1.14 °C above the 1961–1990 average. Mean minimum temperatures in September were above to very much above average for the south of the state and below average for parts of the far north. Victoria's area-averaged mean minimum temperature was 6.42 °C, 0.67 °C above the 1961–1990 average. Victoria's area-averaged mean temperature was 11.88 °C, 0.91 °C above the 1961–1990 average.

Across the Murray-Darling Basin, minimum temperature deciles varied from below average to above average (Figure 4), while maximum temperature deciles varied from above average to very much above average (Figure 5).

The September average rainfall total in the MDB was very much average in the south to above average and a small area very much above average in the basin's north. Most of Victoria was below average

Rainfall totals for Victoria in September were below to very much below average for much of the state, with parts of Gippsland recording their lowest September rainfall on record. In contrast, rainfall totals were above average for small areas around Portland and Wilsons Promontory. Victoria's average rainfall total for September was 36.1 mm, which was 44% below the 1961–1990 average. (Figures 4 & 5), the 13th driest on record for all Septembers since 1900. There is no current situation expected that would require LMW to initiate our DPP.

Figures 3 & 4 - Murray-Darling Basin minimum temperature deciles for September 2025) and maximum temperature deciles for September 2025. Source: Bureau of Meteorology

Figure 3 – Minimum Temperature Deciles for September 2025

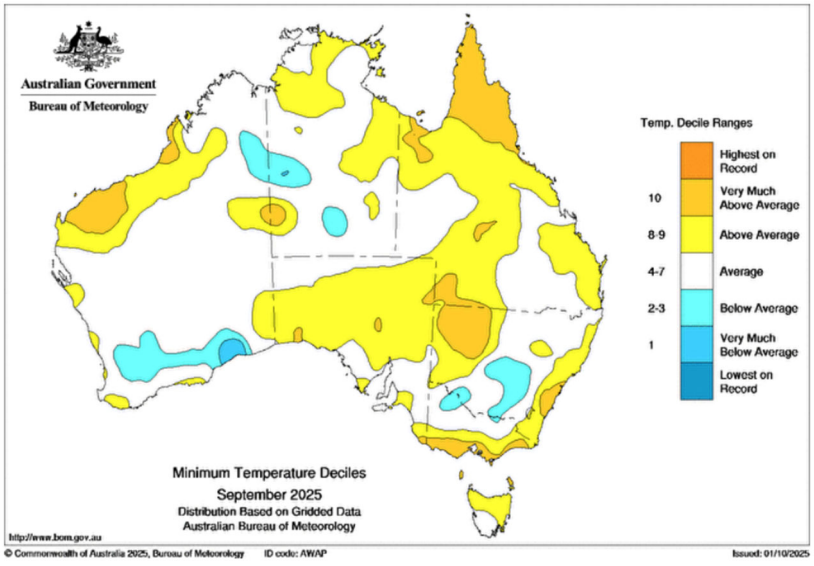
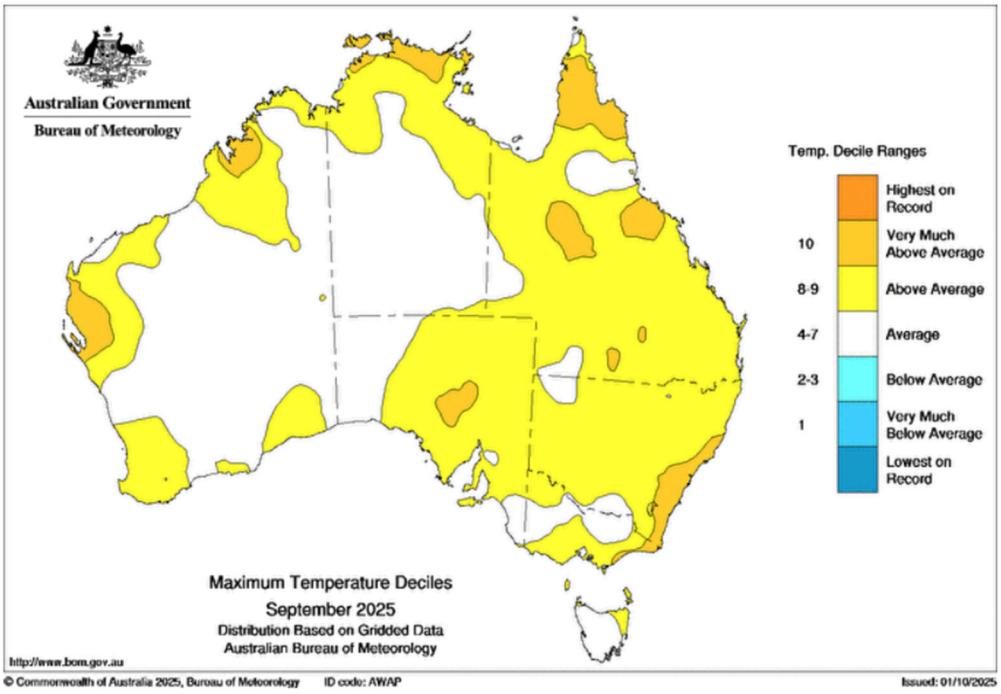


Figure 4 – maximum Temperature Deciles for September 2025



Figures 5 & 6 - Murray-Darling Basin rainfall for September 2025 and rainfall deciles September 2025. Source: Bureau of Meteorology

Figure 5 - Murray Darling Basin September 2025 Rainfall

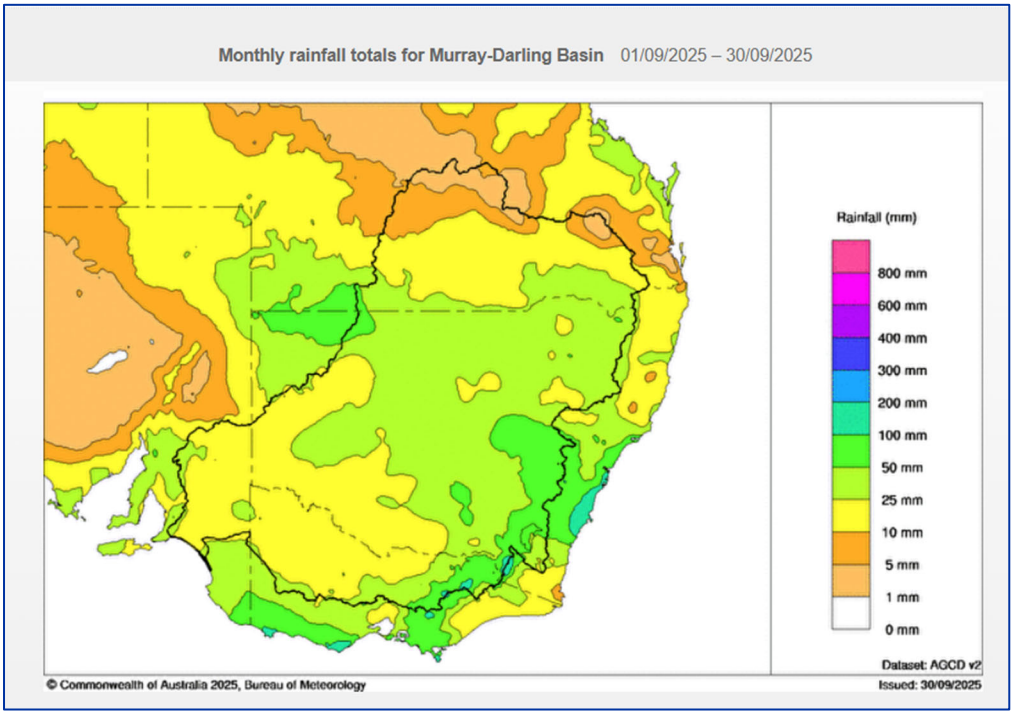
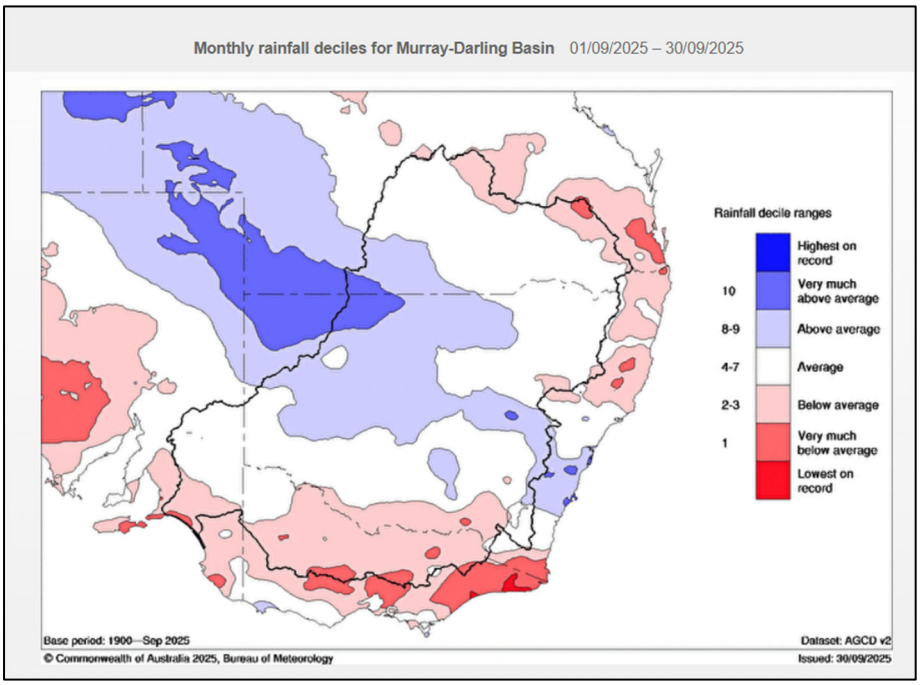


Figure 6 - Murray Darling Basin September 2025 Rainfall Deciles



River Murray system inflows were below average during June and July 2025, continuing the dry start to the water year. However, the situation has improved more recently, with inflows boosted by rainfall in parts of the northern Basin and transfers from the Menindee Lakes. The combined water storage for the basin is currently at 68% capacity, lower than the 77% recorded this time last year but still sufficient to meet demands for the 2025–2026 water year.

The MDBA expects inflows from the Menindee Lakes to continue through October 2025. Releases from the lakes, combined with active management of the system, have provided a stable flow to South Australia. This active management is a key part of the strategy to meet demands and mitigate risks from the drier conditions experienced earlier in the season.

While the immediate outlook is stable, the MDBA continues to actively manage the system. The risk of water delivery shortfalls remains a consideration, particularly if dry conditions and high temperatures persist. Water quality issues, such as blue-green algal blooms, are also a concern, with elevated levels reported in parts of the basin as of mid-October 2025. There is no current situation expected that would require LMW to initiate our DPP.

Figure 7 - Murray system monthly inflows (excluding Snowy, Darling, IVT and environment inflows).

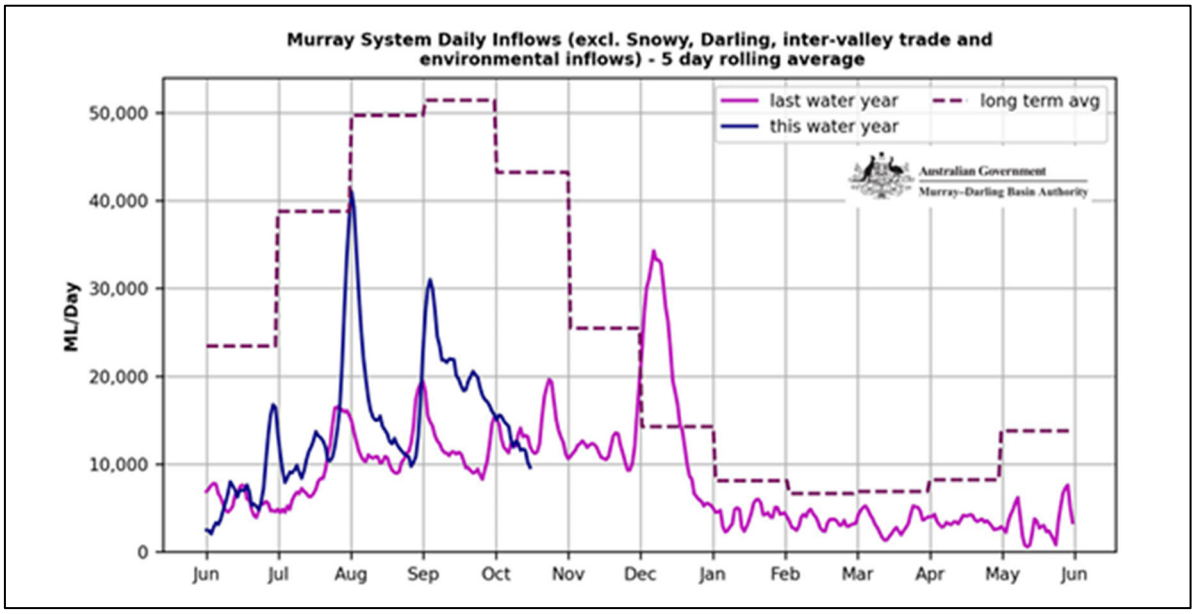


Table 10 compares the equivalent seasonal determination in the Murray system for 15 October 2025 between 24-25 and 25-26. This secures a positive outlook for this water year regarding water resource position.

Table 10 - Seasonal determination in the Murray system – 24-25 and 25-26

Date of Announcement	High / Low Reliability Water Share	
	2025-26	2024-25
15 October 2025	90%, 0%	94% /0%

Climate Outlook

The bureau's outlook for November is Rainfall is likely to be above average (60% to 80% chance) for most of the eastern half of Australia, with the strongest chances over Cape York Peninsula.

Figure 8 – November 2025 Rainfall Outlook

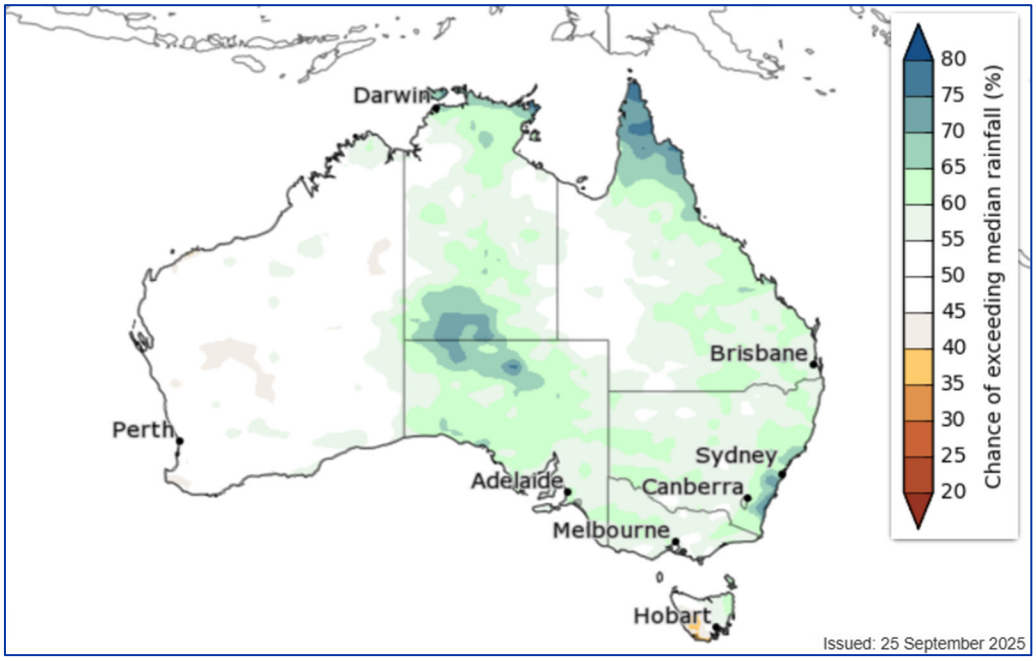


Figure 9 & 10- Chance of exceeding the median rainfall (November to January) and chance of exceeding the median maximum temperature (November to January).

Figure 9 – Chance of exceeding median rainfall November – January

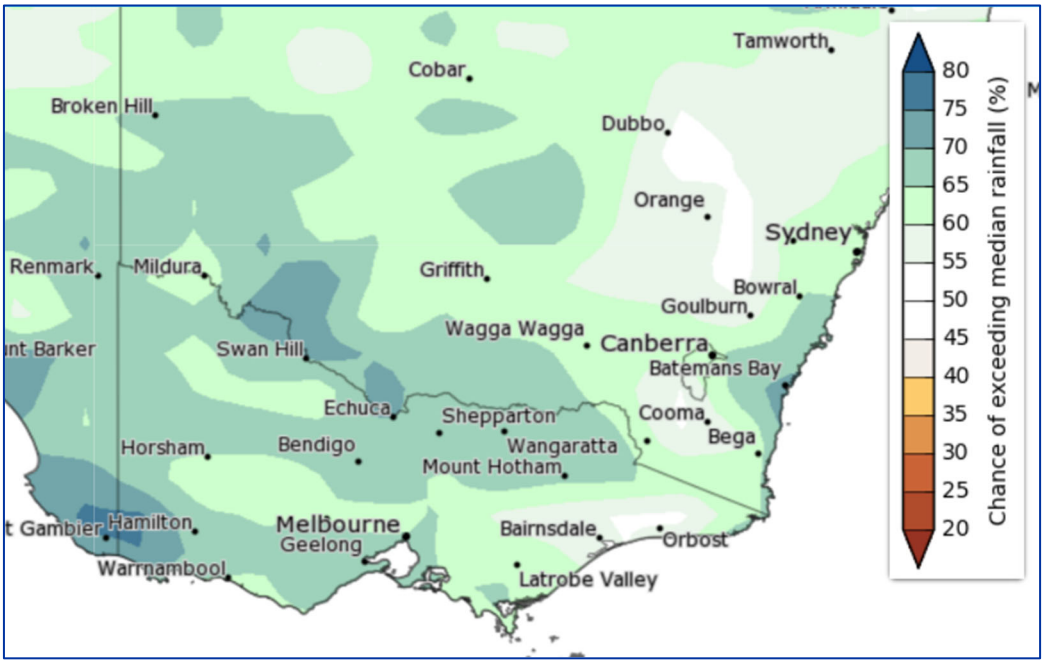
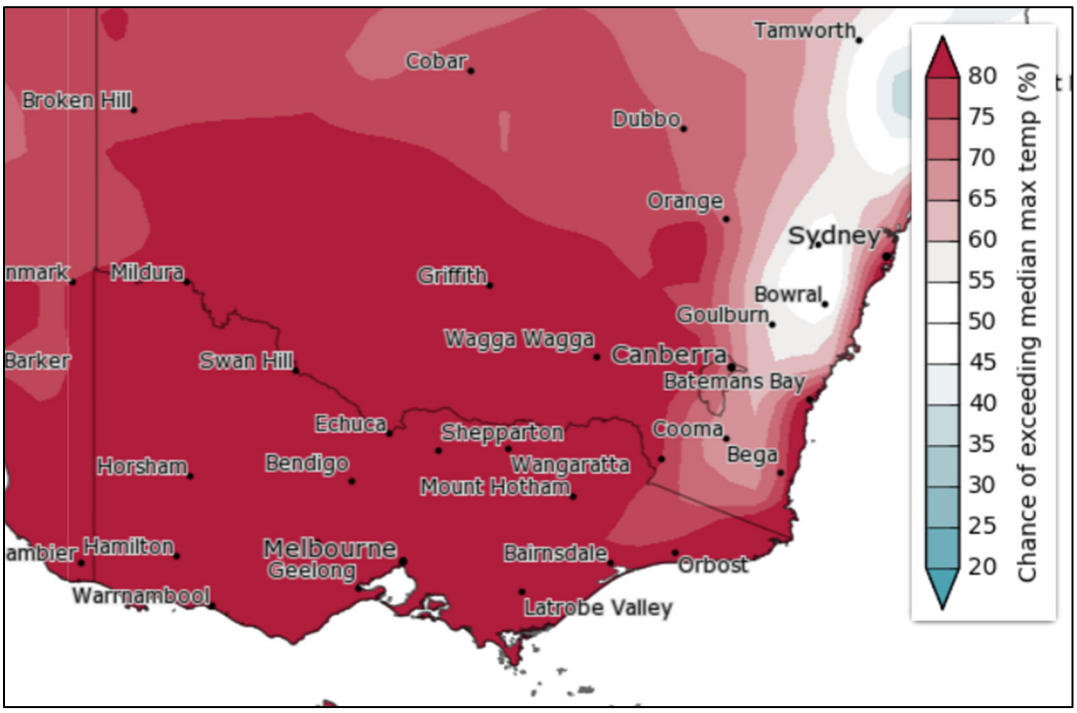


Figure 10 – Chance of exceeding median maximum temperature November – January



The bureau has released a climate driver update. The El Nino-Southern Oscillation (ENSO) modelled output is currently neutral and is forecast to remain neutral until December. Some models show a larger spread in the model forecasts towards the end of spring, indicating less certainty of the forecast at this time.

The Indian Ocean Dipole (IOD) is currently neutral and is likely to remain neutral until at least December.

Temperatures across Australia, days and night are likely to be warmer than average in winter and spring 2025.

Water storages and Streamflow

Total Southern Basin water storage

MDBA active storage on 1 June 2024 was 6,289 GL (74%). By the end of May 2025, the MDBA active storage was around 4,363 GL (56%). Table 10 shows the sum of active storage in Dartmouth and Hume Reservoirs, Lake Victoria and the Menindee Lakes.

Table 11 - Sum of active storage in Dartmouth and Hume Reservoirs, Lake Victoria and the Menindee Lakes.

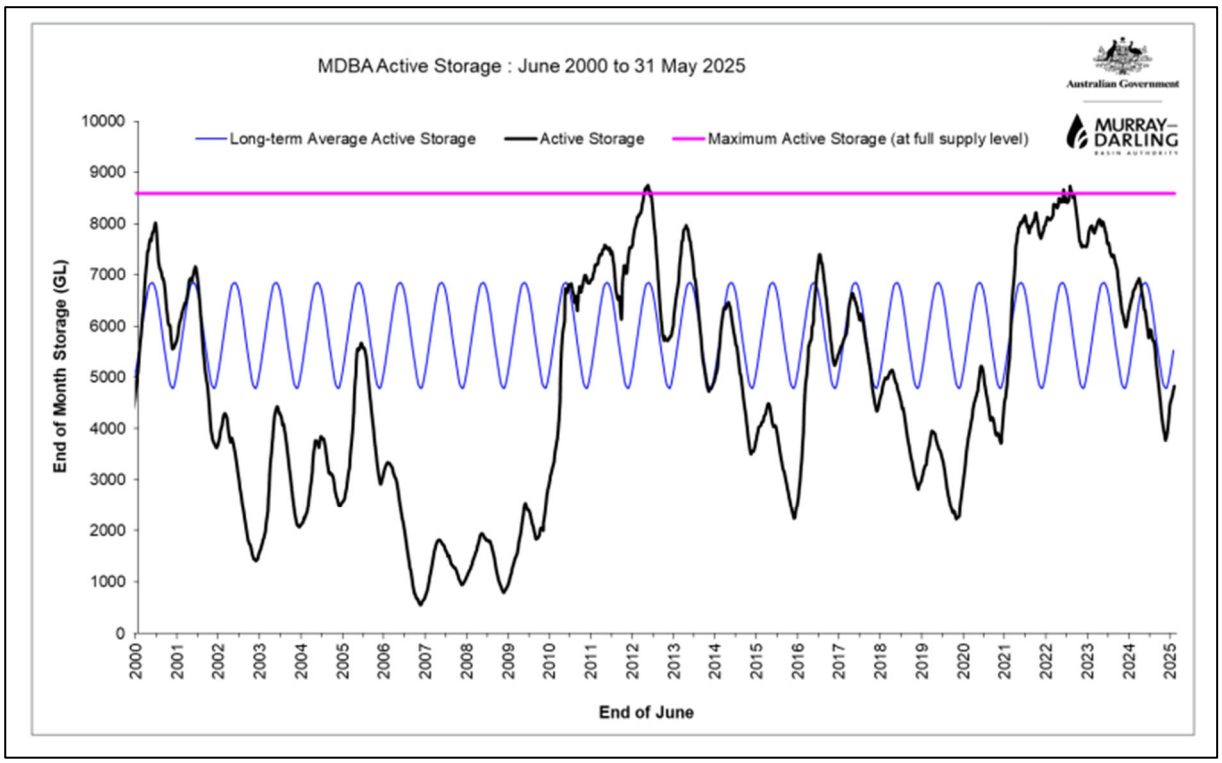
Major Storage	Total capacity (GL)	Active capacity (GL)	Total water in storage (GL)	Percentage of total capacity	Total active water in storage available to the MDBA (GL)**	Percent of total active storage held in each storage
Dartmouth Reservoir	3,856	3,785	2,758	71%	2,687	62%
Hume Reservoir	3,005	2,982	847	28%	824	19%
Lake Victoria	677	577	370	54%	270	6%
Menindee Lakes*	1,731	1,251	1,062	68%	582	13%
River Murray System total	**9,269**	**8,595**	**5,037**	**56%**	**4,363**	

*Menindee Lakes may be surcharged up to 2,050 GL under certain circumstances. New South Wales (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.

**Total volume of active water in storage only includes the volume of active storage in Menindee Lakes when MDBA has access to water in Menindee Lakes.

Figure 12: MDBA active storage, June 2000 to May 2025. This graph shows the sum of active storage in Dartmouth and Hume Reservoirs, Lake Victoria, and the Menindee Lakes. Menindee Lakes only contributes to MDBA active storage when the storage volume is available as a shared resource. There is no current situation expected that would require LMW to initiate our DPP.

Figure 11 -Southern Basin combined storage



Source: Bureau MDB Water Information Portal.

- The basin has transitioned from a period of high-water availability in 2024 to a drier outlook in 2025. While allocations have been managed to ensure reliability, storage levels are lower. The forecast suggests the 2025–26 wet season could bring a wetter climate phase, but operational management remains critical to balance demands under a variable and changing climate.
- *Capacity:* Southern Basin storages have seen a significant drawdown since mid-2024 due to low inflows and high irrigation demand. In contrast to the healthy levels observed in early 2024, storage levels have decreased, but the MDBA remains confident that current reserves, including water transferred from Dartmouth Dam, are sufficient to meet demands for the remainder of the 2025–26 water year.
- *Current levels (as of October 2025):* Storage levels have continued to fall through mid-2025. For example, Hume Dam was at 55% capacity in March 2025, and Dartmouth Dam was at 76% in May 2025. The Menindee Lakes system had dropped to 44% in May 2025 but later increased to 79% by September 2025 due to rainfall in the northern basin.
- *Victoria (Murray system):* The previous water year saw High-Reliability Water Shares (HRWS) reach full allocation later than in 2023–24. The dry start to 2025–26 meant that Lower-Reliability Water Shares (LRWS) received no allocation during 2024–25.
- *Victoria (Goulburn system):* Similar to the Victorian Murray, HRWS reached 100% allocation in 2024, but LRWS holders received no allocation in the 2024–25 water year due to dry conditions.

- *New South Wales (Murray system):* General Security (GS) allocations were later and lower in the 2024–25 season. Full allocation was reached in March 2025, eight months later than the previous year.
- *New South Wales (Murrumbidgee system):* General Security allocations were 41% for 2024–25, the lowest end-of-year allocation since 2018–19. The dry conditions affected allocations throughout the water year.
- *South Australia:* The opening allocation for the 2025–26 water year was 100% for River Murray irrigators, announced in June 2025. As this was over 50%, no private carryover was available.
- *Recent conditions (2025):* Most of the southern basin received below-average rainfall through June to August 2025. While some rain has fallen, inflows to the River Murray system have been consistently below the long-term median.
- *Current climate drivers:* As of October 2025, the Bureau of Meteorology has declared neutral El Niño-Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) conditions, though there are signs of climate drivers that could heighten rainfall risk in the coming season.
- *Short-term outlook (November 2025–January 2026):* Weather forecasts suggest a heightened risk of heavy rainfall for eastern and northern Australia. This is consistent with a weak La Niña and negative IOD phase. For the southern basin, this translates to a potential increase in wet weather events, though southern areas could still experience above-average temperatures and fire risk during summer.
- *Mid-term outlook (2026):* Climate science indicates that the Basin will continue to experience increased climate variability, with more frequent extreme weather events, including floods, heatwaves, and droughts.
- *Mid-term outlook (2026):* Climate science indicates that the Basin will continue to experience increased climate variability, with more frequent extreme weather events, including floods, heatwaves, and droughts.
- There is no current situation expected that would require LMW to initiate our DPP.

Figure 12 -Total Inflow to Lake Dartmouth Oct – Dec 2025

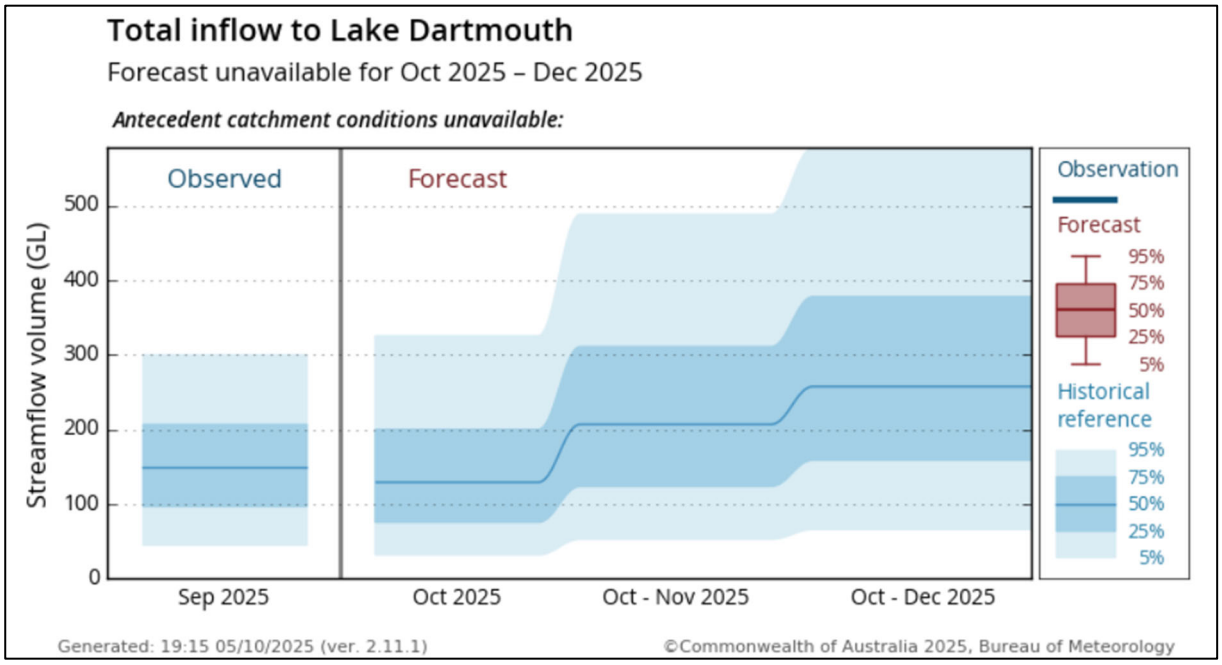


Figure 13 -Unregulated inflow in Hume Dam Oct - Dec 2025

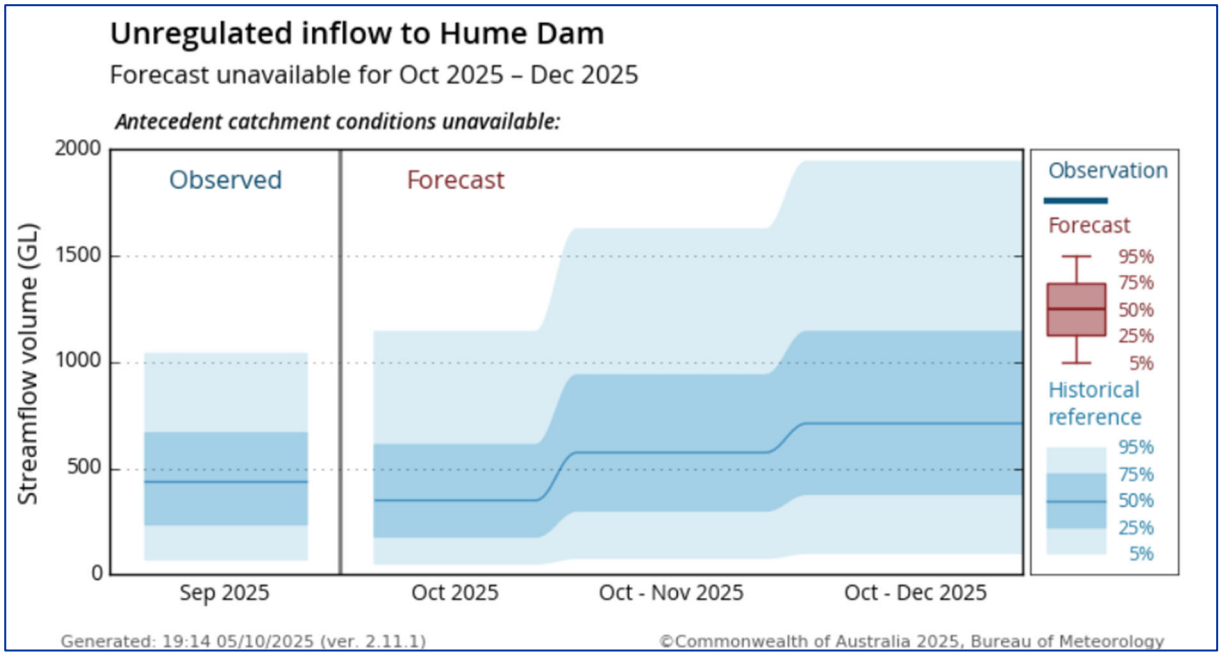


Figure 14 -Total Inflow to Lake Eildon Oct – Dec 2025

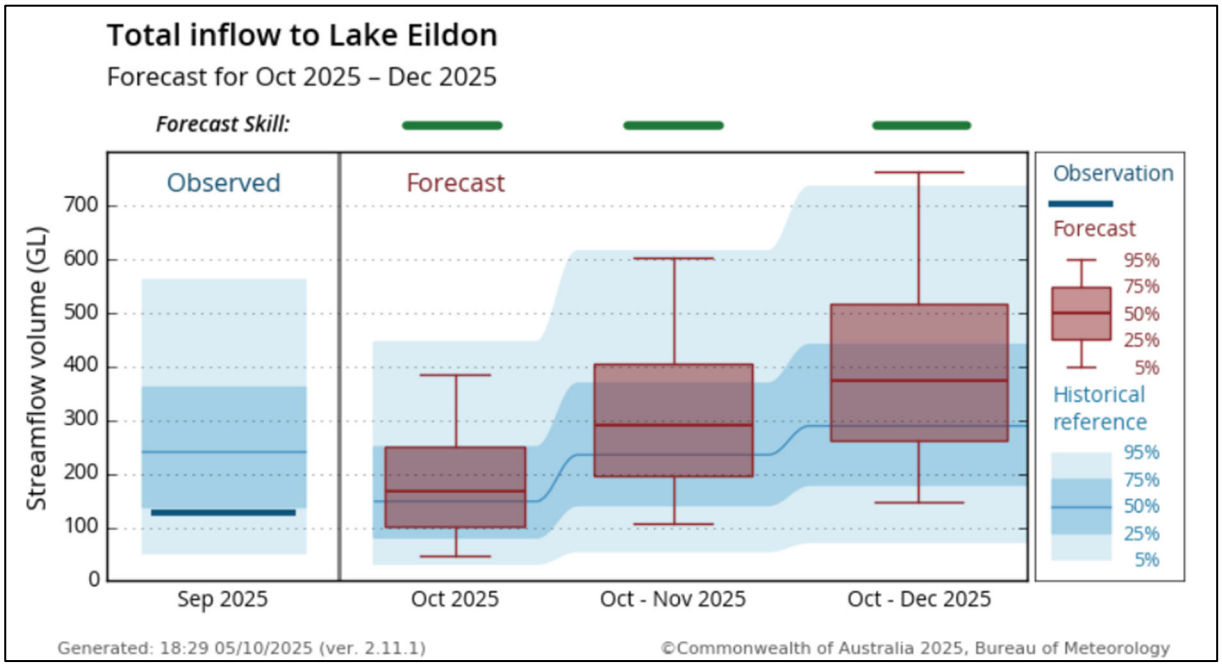
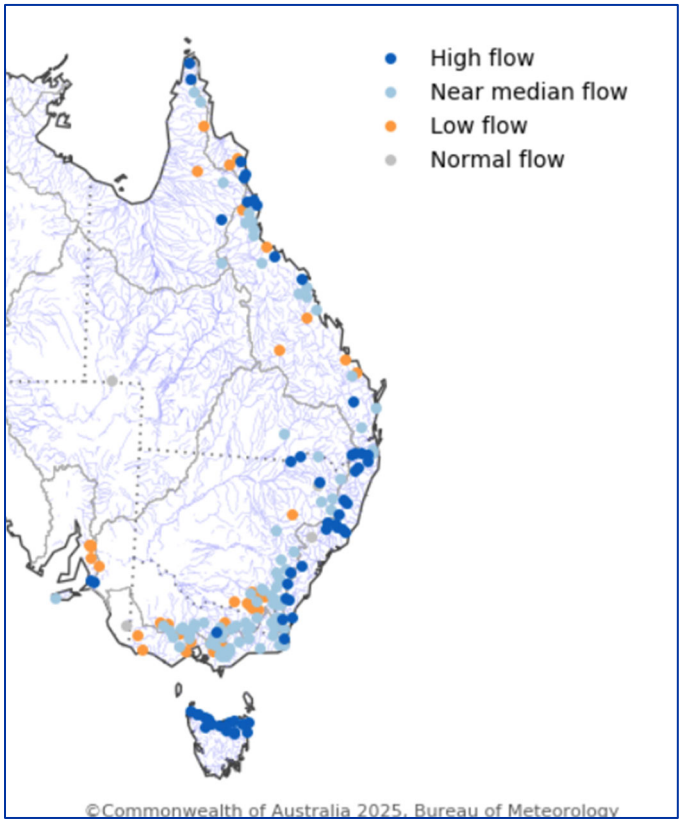


Figure 15 – Streamflow forecast from Oct to Dec 2025



The current planning process for the River Murray Operations 2025-26

Water storages

- *Storage levels:* Following a dry start to the 2025–26 water year, inflows have increased slightly but have not yet significantly boosted storage volumes, especially in the Hume Dam.

- *Dartmouth Dam:* As of October 20, 2025, Dartmouth Dam is at 72.4% capacity. This is slightly higher than the 71% reported earlier in the month and in May, after small inflow gains throughout winter and spring.

- *Hume Dam:* Hume Dam has seen some increase in volume but remains relatively low. As of October 20, 2025, it is at 51.7% capacity. This is a significant improvement from the low levels seen in early August, but still a notable gap from the highs of previous years.

- *Menindee Lakes:* The storage levels in the Menindee Lakes have been volatile. Following dry periods, inflows from the northern basin in late winter and early spring boosted the level significantly. The system was at 87% capacity as of October 9, 2025, with further inflows expected. The MDBA has been managing releases from the lakes to help meet downstream demands.

Water allocations and use

While opening allocations were relatively high due to carry-over from previous wetter years, the dry start has affected updates to seasonal determinations.

- *NSW Murray:* The General Security allocation was increased to 18% as of October 1, 2025, significantly lower than the full allocations seen in the previous year.

- *Victorian Murray:* The High-Reliability Water Share (HRWS) increased to 40% as of mid-July 2025, with no Low-Reliability Water Share (LRWS) allocation declared.

- *Water for the environment:* Significant environmental water is being delivered throughout the 2025–26 water year. For example, in October, operations were underway at the Katarapko, Pike, and Chowilla floodplains and locks. The Commonwealth Environmental Water Holder (CEWH) has also outlined priorities in its 2025–26 Water Management Plan

Annual Operating Outlook and shortfalls

- *Delivery risk:* The MDBA maintains that a delivery shortfall is unlikely for the 2025–26 water year, as stated in its Annual Operating Outlook (AOO) released in August.

- *Demand management:* The MDBA continues to actively manage the system to meet demand. This includes releases from the Menindee Lakes and managing the system to stay ahead of need, as highlighted by the MDBA in August. The risk of delivery shortfalls is continuously monitored, particularly during peak demand periods.

- There is no current situation expected that would require LMW to initiate our DPP.

Key operational changes and risks

- *Water quality threats:* As of mid-October, the MDBA identified elevated levels of blue-green algae across many parts of the Basin, including mid-Murray.
- *Trade changes:* New regulations regarding water market intermediaries and trust accounting became effective on October 1, 2025. A randomized process was also implemented for Goulburn-to-Murray trade opportunities.
- *Water for the Environment (WFE):* Recent flow events in the northern basin protected by new rules have delivered environmental water held to Menindee Lakes. Environmental flows continue to be managed to achieve outcomes like elevated water levels in certain floodplain areas in SA.
- *Climate variability:* While climate drivers were neutral for much of 2025, forecasts for later in the year hint at wetter conditions, though drier periods in the south are still possible. The MDBA is prepared to manage the system for a range of conditions, as outlined in its Annual Operating Outlook (AOO).
- There is no current situation expected that would require LMW to initiate our DPP.
-

LMW will be monitoring the climatic conditions and the water resource levels of the Murray system. If extreme climatic changes are observed, we will implement our drought and emergency response plans. We will take steps to create awareness about the changes and actions amongst our customers and community through regular communications via our website and social media pages (Facebook, LinkedIn).

Long-term impact of climate change in Victoria

Observed climate changes in Victoria (as of 2024)

- *Warming trend:* Victoria's climate has continued to warm since the 19th century, with the warming trend accelerating in recent decades.
- *More frequent and intense extreme heat:* The number of very hot days has more than doubled since 2005. Inland locations have experienced larger changes, with some areas seeing up to five times as many very hot days. Heatwave frequency, duration, and intensity have also increased.
- *Increased fire danger:* There is strong evidence that climate change is affecting fire weather, leading to longer fire seasons and more frequent days of significant fire danger.
- *Reduced cool-season rainfall:* Over the last 30 years, cool season (April–October) rainfall has declined by more than 10% compared to the 1961–90 period. It is extremely unlikely that these declines are due to natural variability alone.
- *More intense short-duration rainfall:* Extreme rainfall events are generally becoming more intense. Since 1985, the intensity of extreme rainfall events has almost doubled.

- *Declining streamflow response:* The observed shift in streamflow response to rainfall, where less runoff is generated from the same amount of rain, continues in many catchments. This is due to warmer temperatures and drier soils.

Projected long-term changes

- *Continued warming:* Victoria's average temperature is expected to keep rising throughout the 21st century. Under a high-emissions scenario, Victoria could warm up by around 3.0°C by 2090 compared to the 1986–2005 period.
- *More extreme heat:* Longer, more intense, and more frequent heatwaves are very likely. Under a high-emissions scenario, the frequency of heatwave days could more than triple by 2090.
- *Drier cool seasons:* Cool-season rainfall is projected to continue declining significantly, especially under a high-emissions scenario toward the end of the century.
- *Uncertainty in warm-season rainfall:* Changes in warm-season (November to March) rainfall are less certain. However, the intensity of extreme, short-duration rainfall events is projected to increase.
- *Reduced streamflow:* Overall, future runoffs in Victoria will be lower due to projected declines in cool-season rainfall and higher potential evapotranspiration from higher temperatures. A small reduction in rainfall can lead to a much larger reduction in streamflow; for instance, a 10% rainfall drop may result in a 20–30% streamflow reduction. Some Victorian catchments could see streamflow reduced by around 50% by 2065.
- *Altered flood patterns*: Small floods are likely to become smaller, while large floods are projected to become larger, due to more intense rainfall events. Flood risk could double by the end of the century under medium-to-high emissions pathways.
- *Hotter, faster droughts:* Future droughts are projected to be hotter, longer, more frequent, and more intense. They may also develop more quickly due to higher evapotranspiration.

Strategic planning implications

The updated climate projections reinforce the need for strategic water management. The Victorian Government is using new climate science in its planning to ensure water resources are managed sustainably. Key strategies include:

- *Diversifying water sources:* Investing in climate-resilient water sources, such as recycled water, stormwater, and desalination.
- *Improving water efficiency:* Reducing demand through programs that encourage more responsible water use in homes and businesses.
- *Enhancing infrastructure resilience:* Upgrading infrastructure to cope with extreme weather events, including more intense rainfall and prolonged dry periods.
- *Prioritising environmental and cultural water:* Managing water to support a healthy environment, including maintaining minimum flows and supporting environmental objectives for Traditional Owners.

- *Robust planning:* Continuously updating water outlooks and strategies based on the latest climate models to manage a highly variable climate.

Forward Outlook 2025-26

This forward Outlook has taken all of LMW's urban supply systems and treated them as one combined urban system.

Allocation for HWRS on the Murray system increased to 90% on 15 October 2025 from 39% (as of 1 July 2025) but falls short of the rapid jump to 98% and 100% experienced in November 2024. The increase from July reflects conservative forecasts that were exceeded by modest inflows during winter and spring.

While the system is not yet at 100% HRWS, MDBA has noted that inflows have been "above estimates," which helped boost allocations. However, further improvements are now less certain as the season progresses and flows typically reduce.

The HWRS on the Goulburn system is 54% on 15 October 2025 from 100% allocation available in November 2024 and reflects a much drier start to the 2025–26 season. Inflows into Goulburn storages were also slightly better than initial forecasts, but the system is far from reaching 100% HRWS at this point in the season. MDBA has cautioned entitlement holders to plan for the possibility of limited reserves next year if dry conditions persist.

For climate outlook, the Bureau of Meteorology has declared neutral El Nino Southern Oscillation (ENSO) and Indian Ocean Dipole (IOD) conditions, but there is still a risk of a wetter period developing later in the season. The climate is influenced by several factors, and the overall outlook for the southern basin remains uncertain, requiring careful management of water resources.

The situation in late 2025 differs significantly from late 2024. In 2024, the Murray system quickly moved towards full allocation, and the Goulburn system was already at 100% HRWS. In 2025, allocations rose much more slowly due to drier conditions. The Murray is at 90% and the Goulburn is only at 54%. Current forecasts indicate a need for continued rainfall to improve water availability, contrasting with the full allocation reached easily in 2024. There is no current situation expected that would require LMW to initiate our DPP.

Factors to consider in this forward outlook:

- Typical annual potable water usage is generally between 19,000 and 24,000 ML
- The volume of water supplied to urban customers as of 30 September 2025 was 3,916 ML (Source: LMW operational raw water extraction data)
- A positive seasonal outlook for 2025-26 means LMW will have enough allocation to meet its Urban customers' demand with a surplus volume at the end of the season.
- Similarly, rural customers are likely to have enough allocation to meet their irrigation and stock and domestic demand.

Figure 16 summarises the urban water availability based on the supply-demand balance for the entire LMW system. The volume of available water is plotted in a cumulative monthly pattern considering seasonal allocation and trade (No trade volume assumed from November 2025 to June 2026).

The demand is plotted as a cumulative monthly volume (raw water) based on the actual usage till October 2025 and forecast for November 2025 -to June 2026 based on usage

pattern observed in the last five years. The data indicates there is no likely shortfall for the 2025-26 season.

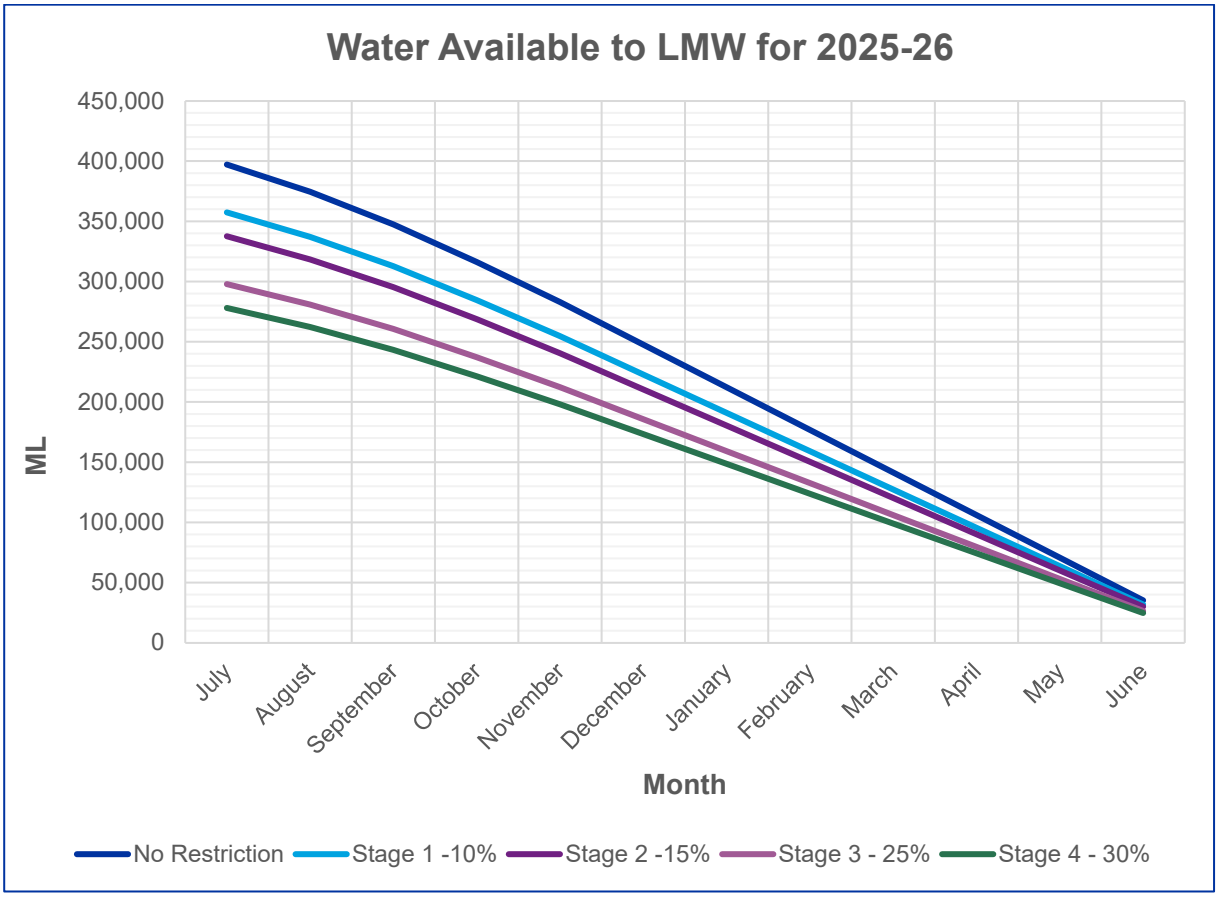
Figure 16 - Forecast Water Supply Demand (ML) for LMW's entire system 2025-26

Source	2024/25 forecast allocation 2024		2025/26 estimated allocation		Worst Case
	Average	Dry	Average	Dry	
Murray	100%	100%	100%	94%	46
Loddon River	100%	100%	77%	67%	65

Figure 17 – Water Available to LMW for 2025-26

Also showing availability under restriction conditions

Note: No restrictions have been predicted in this period.



Key Achievements and Actions to address water security.

Supply System	Action	Timing	Status	Comments
Mildura	Filter Media Replacement	First half of 2025	Complete	Improve water quality from Mildura and Mildura West WTP's
Mildura	Replacement of section of ROCLA pipe	First half of 2025	Complete	Critical section of pipework leaving Mildura WTP had failed
Red Cliffs	Upgrade urban water pump station and rising main to community	Started proposed completion end of 2026.	Commenced	Improve flow and pressure to Red Cliff community
Mildura	Internal coating of 18ML steel Treated Water Storage.	March – August 2025	Complete	Replace internal coating to extend life of asset.

Service Delivery

During the 24/25 year, our region experienced an uninterrupted season. The 24/25 season was also hot and dry. As such, we delivered large volumes of water to our urban and rural customer base.

We had high levels of water allocation, which meant delivery volumes were significant.

Customer Engagement and Compliance

Our customer services survey of our customer base continues to show we have a good relationship with our customers, and we continue to seek to improve this year on year.

Several advisory notices and formal warnings were issued to rural customers in relation to S.33E (Unauthorised Take of Water) and S.289 (Wrongful Take of Water) of the Water Act 1989.

We acknowledge the positive behavior change made by most of our rural customers with an approximately 95% reduction in water theft. This is due to an increased focus and more efficient implementation of our compliance and enforcement processes and the consistent reinforcement of the Minister's Zero Tolerance of Water Theft messaging.

Operational

During the 2024/25-year, LMW had a season uninterrupted with the supply of water to the urban and rural customer bases. There were no river supply issues and no major blue green algae or black water events.

High Level Actions

Actions

Various aspects of 2022 UWS projected to 2071 are implemented. Some of the completed and ongoing actions are discussed below.

1 - Purchase of water share to ensure the urban water demand and water security is maintained. LMW will assess the water resource position periodically and purchase adequate additional shares. 694ML of additional water shares were purchased during the 2023/24 period. This will be an additional entitlement to supplement dry years.

2 - LMW is continuing with the following activities to reduce demand for potable water

- Permanent Water Savings Rules (PWSR) campaigns.
- Deliver Schools and Community Education Programs.
- Deliver Community Housing Retrofit and rebate programs.

3 - LMW actively manages its holding of urban and rural water shares held by the corporation. We actively trade water allocation to ensure surplus volumes are placed into the consumptive allocation marketplace.

4 - LMW will continue to explore opportunities for alternative water supplies and alternative sources to supplement potable water.

5 - BGA blooms may impact rural customers particularly the stock and domestic customers. Given the potential for the presence of algal toxins in the water during the BGA bloom periods, stock and domestic customers are advised not to use the water as a precautionary measure to minimise the risk.

With the drier climatic outlook, the likelihood of extreme events like bushfires and drought is possible. We will follow our emergency and response plans as required.

LOWER MURRAY WATER

www.lmw.vic.gov.au