

Annual Water Outlook

December 2024

Document Number: A5197718
Version:



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Document History and Distribution

Version (s)

Version	Date	Author(s)	Notes
1	24 September 2024	A. Shields A. Harbour G. Smith	Document creation
2	15 October 2024	J. Steinfort	Regulated systems update
3	22 October 2024	S. Hayes	Update & review of Groundwater & Streams
4	16 December 2024	J. Steinfort A. Shields	Incorporating feedback from DEECA & updating storage, inflow and seasonal determination data

Distribution

Version	Recipient(s)	Date	Notes
3	DEECA	31 October 2024	Draft for comment
4	DEECA, GMW website	16 December 2024	Final

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Executive Summary

Rainfall during the 2023/24 water year was average to below average for large parts of northern Victoria, with the northeast recording very much below average rainfall. Inflows were below the long-term average at most Goulburn-Murray Water (GMW) storages, particularly the western storages in the Loddon system, which recorded inflows below 50 per cent of their annual average.

The Campaspe system was the only system to open with a seasonal determination of 100 per cent of high-reliability water shares (HRWS) for the 2024/25 water year. The Goulburn and Loddon systems opened the year with 69 per cent HRWS and the Murray system opened with 63 per cent HRWS. The Broken system opened at 5 per cent HRWS and the Bullarook system seasonal determination was 0 per cent HRWS on 1 July 2024.

By 16 December 2024, seasonal determinations had increased to 100 per cent HRWS in the Murray, Broken, Goulburn and Loddon systems. The Bullarook system reached 5 per cent HRWS. The low-reliability water share (LRWS) seasonal determination in the Campaspe system was 47 per cent and 100 per cent in the Broken system.

The seasonal climate outlooks issued by the Bureau of Meteorology on 28 November 2024 indicate the chances of exceeding median rainfall across the GMW region from December 2024 to February 2025 is between 60 and 70 per cent.

Resource improvements in 2024/25 will be directed towards increasing HRWS seasonal determinations in the Bullarook system before reserves for 2025/26 are established. With LRWS available in the Campaspe system, water is available to support HRWS seasonal determinations in 2025/26. The Broken, Bullarook and Ovens catchments are classified as annual systems and water availability will depend on seasonal conditions and inflows closer to the start of 2025/26.

GMW, as delegated Resource Manager for northern Victorian systems, will issue a detailed outlook for 2025/26 seasonal determinations in regulated systems on Monday 17 February 2025.

The unregulated systems of the Central and Eastern regions started the 2024/25 season with few restrictions; only the Black Dog Creek (Upper) and Bight Creek in the East and Boosey Creek in the Central were impacted. However, the Western region began the water year with restrictions on the Back, Bet Bet, Bullock, Coghills, Cornella, Creswick, McCallums, Muckleford, Slattery, Smiths, Stony and Wanalta creeks. Under the Bureau of Meteorology's rainfall outlook, restrictions in the larger streams are likely, while the smaller tributary streams will experience restrictions and suspensions.

Groundwater aquifers across northern Victoria remained stable throughout 2023/24, with only minor reductions in groundwater levels observed due to lower-than-average rainfall and average to below average use. Groundwater licence holders have access to 100 per cent of their entitlement, except for licence holders in the Barnadown Zone within the Lower Campaspe Water Supply Protection Area (WSPA) who have a 75 per cent allocation for 2024/25. The allocation in the Katunga WSPA increased to 100 per cent this year due to good aquifer response occurring in 2023/24. Groundwater levels are expected to begin to drop in 2024/25 with increased extraction anticipated.

Current catchment and water resource conditions do not appear to favour any adverse water quality risks. However, blue green algal blooms and blackwater events are notoriously unpredictable. While these events are unlikely to prevent supply to customers, they could impact aquatic life and recreational use.

Introduction

Part 4-2 of the Statement of Obligations (General) 2015 requires water corporations to prepare an Annual Water Outlook by 1 December each year. This document provides information in accordance with this obligation and will assist the development of the Water Outlook for Victoria.

The purpose of the Annual Water Outlook is to provide an outlook of water availability for the remaining months of 2024/25 and what conditions are possible at the start of the 2025/26 water year.

GMW's role is to efficiently manage, store and deliver water to more than 21,000 active customers involved in a diverse range of enterprises and interests across northern Victoria. Our customers include gravity irrigation, regulated and unregulated surface water diverters, groundwater, urban water corporations and environmental water holders. More information about GMW and its services are available on the GMW website, www.gmwater.com.au/about.

This water outlook covers the status and outlook for regulated, unregulated and groundwater sources as well as water quality.

While this outlook focuses on water availability due to streamflows, storage levels and water quality, there may be other rare circumstances due to extreme events or emergencies such as bushfires in our catchments, major loss of power supply or water contamination that may require restrictions to manage water demands.

Current climate and streamflow in the longer context

Victoria's climate and streamflow is highly variable, but within this variability we have experienced a warming and drying trend over recent decades.

In comparison to historical conditions, the GMW region is already experiencing trends toward:

- higher temperatures and hotter days
- reductions in rainfall during the cooler months
- increases in extreme, short-duration rainfall events in some locations
- a shift in the streamflow response to rainfall with typically less streamflow generated for a given amount of rain in some catchments, particularly in western Victoria.

Some of the rainfall declines in the cooler months can be attributed to increases in greenhouse gas concentrations in the atmosphere. During the cooler months, we have been receiving less rainfall from low-pressure and frontal systems.

In the future, over the longer term the GMW region can expect:

- the rainfall reductions during the cooler months to persist
- increases in extreme rainfall events
- increases in potential evapotranspiration due to higher temperature and lower relative humidity
- reductions in streamflow because of less rainfall and higher potential evapotranspiration
- the streamflow response to rainfall to no longer remain the same, and generally decline.

Victoria's climate will continue to be variable, with wet years and dry years against a background drying trend. With a warmer future and projections of declining water availability, we can expect more frequent and severe droughts in coming decades and increases in extreme rainfall events.

The Victorian Government is investing in further research to better understand how Victoria's climate is changing and the water resource implications, through the Victorian Water and Climate Initiative. More information on the observed changes and longer-term future climate and water projections can be found at: www.water.vic.gov.au/our-programs/climate-change-and-victorias-water-sector/hydrology-and-climate-science-research/victorian-water-and-climate-initiative.

Regulated Systems

Current seasonal conditions

Rainfall over the 2023/24 water year was average to below average across most of the GMW region, with the north-east region experiencing a very much below average year. Inflows were below the long-term average at most GMW storages, particularly the western storages in the Loddon system, which recorded inflows below 50 per cent of their annual average (based on climate conditions observed since 1975).

In 2023/24 inflows into Lake Eppalock and Lake Eildon were 76 per cent and 93 per cent of the average annual volume respectively. Inflows to Lake Nillahcootie, Goulburn Weir, Dartmouth Reservoir, Lake Hume, Lake Buffalo and Lake William Hovell were between 60 and 100 per cent of the long-term average.

Rainfall across northern Victoria from July to September 2024 was below to very much below average (Figure 1). Dry conditions contributed to lower-than-average storage inflows (Table 1). Inflows to all storages were below half of the long-term averages between July and October 2024.

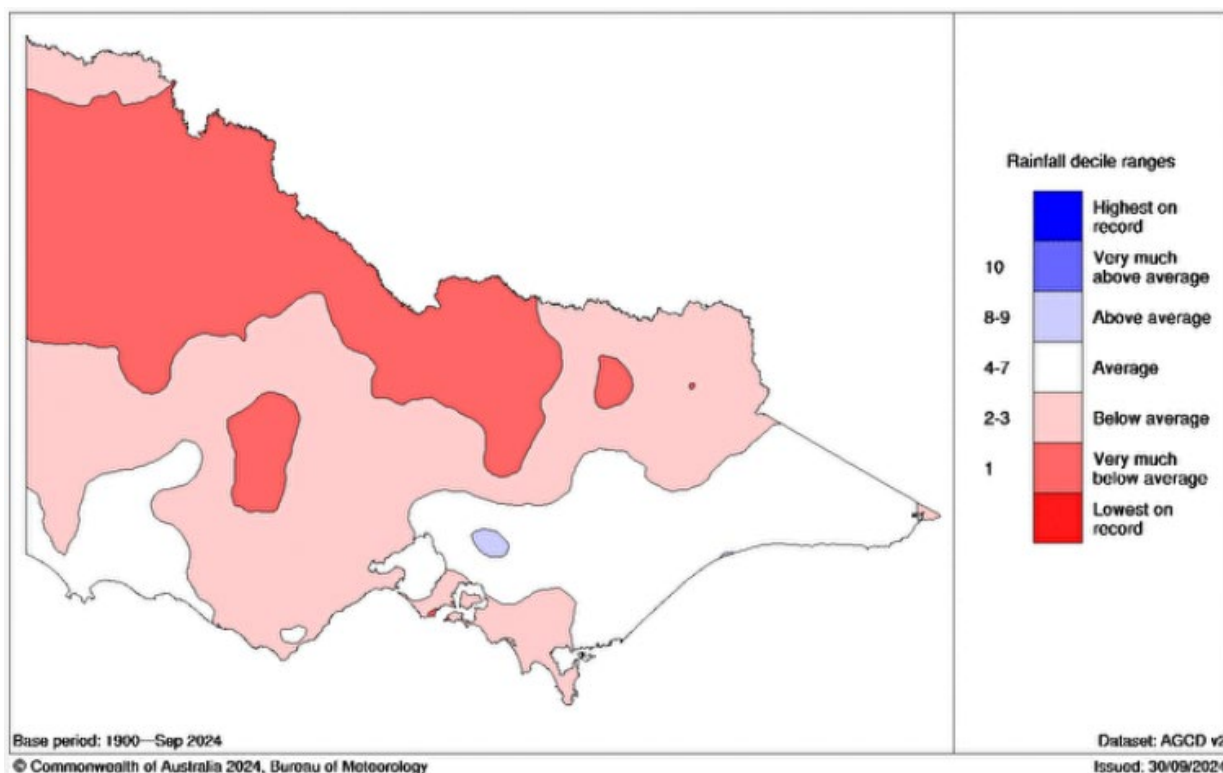


Figure 1. Rainfall deciles for 1 July to 30 September 2024

Table 2 outlines the change in storage volumes and percentages from July to mid-November. Following a dry end to the 2023/24 water year with relatively high demand, most storages were moderately full heading into winter 2024. Below average winter rainfall and an increased demand for irrigation and environmental water at the start of the 2024/25 water year meant that storage levels started to fall. Lake William Hovell filled on 22 July 2024 and Lake Buffalo filled in mid-October 2024.

Table 1. July to October 2024 inflows to the major GMW storages

Storage	July – October inflow (GL)	Percent of average ²	Chance of greater inflow ²
Eildon	340.0	39%	91%
Goulburn Weir ¹	257.1	37%	88%
Hume ¹	396.6	27%	94%
Dartmouth	235.1	48%	87%
Buffalo	72.9	29%	89%
William Hovell	38.4	31%	91%
Nillahcootie	4.2	10%	91%
Eppalock	12.0	11%	88%
Cairn Curran	4.7	6%	93%
Tullaroop	2.1	6%	92%

¹ Natural inflows excluding releases from upstream storages

² Historical flow records that have been adjusted to match climate conditions observed since 1975

Table 2. Storage volume changes from July to mid-November

Storage	1 July 2024 Volume (GL)	1 July 2024 Percentage full	15 November 2024 Volume (GL)	15 November 2024 Percentage full	Volume change (GL)	Percentage full change
Eildon	2,956	89.0%	2,826	84.8%	-130	-4.2%
Hume	2,000	66.6%	1,693	56.3%	-307	-10.3%
Dartmouth	3,643	94.5%	3,449	89.5%	-194	-5.0%
Buffalo*	13.6	58.0%	23.0	98.0%	9.4	40.0%
William Hovell	9.4	68.9%	13.7	99.8%	4.3	30.9%
Nillahcootie	31.4	77.8%	32.3	79.9%	0.9	2.1%
Eppalock	275.3	90.4%	239.1	78.5%	-36.2	-11.9%
Cairn Curran	103.6	70.4%	88.6	60.2%	-15.0	-10.2%
Tullaroop	59.4	81.4%	48.8	67.0%	-10.6	-14.4%

*Lake Buffalo level is managed through winter and spring by passing inflows until the storage was allowed to fill in October

Water availability in northern Victoria early in 2024/25 was supported by the opening seasonal determinations plus the volume carried over from 2023/24. By 16 December 2024, seasonal determinations were 100 per cent HRWS in the Murray, Broken, Goulburn and Loddon systems. The Bullarook system was 5 per cent HRWS.

The volume carried over from 2023/24 in the Goulburn and Murray systems was 993 GL and 757 GL respectively.

Seasonal determinations on 16 December 2024 are shown in Table 3.

Resource Availability

Murray System

The Murray system started 2024/25 with a seasonal determination of 63 per cent HRWS. Dry conditions resulting in below average inflows through winter and the start of spring meant that the seasonal determination gradually increased to 100 per cent on 15 November 2024.

Low inflows during winter and spring meant that operational releases to manage storage levels at Lake Hume were not required in the 2024 winter and spring.

Table 3. Seasonal determinations on 16 December 2024

Water System	High-Reliability Water Share	Low-Reliability Water Share
Murray	100%	0%
Broken	100%	100%
Goulburn	100%	0%
Campaspe	100%	47%
Loddon	100%	0%
Bullarook	5%	0%

As specified in clause 10.5 of GMW's Murray bulk entitlement, water was borrowed from the Barmah-Millewa Forest Environmental Water Allocation at the start of the 2024/25 water year to support early seasonal determinations for high-reliability water shares. The water borrowed from the Barmah-Millewa Forest Environmental Water Allocation has been paid back and further resource improvements will now be set aside for 2025/26 reserves.

On 11 November, the risk of spill in the Murray system was below the 10 per cent threshold needed to make a low risk of spill declaration. A total of 298 GL returned to allocation accounts in the Murray system.

Goulburn System

The reserves established in the Goulburn system from inflows during 2023/24 were enough for the system to commence the 2024/25 water year with a seasonal determination of 69 per cent HRWS. Resources gradually increased during winter to enable the seasonal determination to reach 100 per cent HRWS on 16 September 2024.

Low inflows into Lake Eildon and environmental water deliveries meant that the storage level did not approach the target filling arrangements through winter and into spring. As a result, no releases from Lake Eildon under the target filling arrangements and subsequent deductions from spillable water accounts have occurred so far in 2024/25.

On 11 November, the risk of spill in the Goulburn system was below the 10 per cent threshold needed to make a low risk of spill declaration, A total of 381 GL returned to allocation accounts in the Goulburn system.

Broken System

The Broken system opened the 2024/25 water year with a seasonal determination of 5 per cent HRWS.

Lake Nillahcootie reached approximately 83 per cent capacity during late September 2024 due to below average inflows during winter and spring. The seasonal determinations increased slowly to reach 100 per cent HRWS on 2 December 2024. Further resource improvements in early December enabled the LRWS seasonal determination to increase to 100 per cent on 16 December 2024.

Campaspe System

The Campaspe system opened the 2024/25 water year with a seasonal determination of 100 per cent HRWS. Lake Eppalock levels slowly fell during winter 2024 due to well below average inflows and water released to deliver environmental water. The volume available for allocation has slowly increased and the seasonal determination had increased to 100 per cent HRWS and 47 per cent LRWS on 16 December 2024.

No spills from Lake Eppalock have occurred this season due to the dry conditions and low inflows.

On 11 November, the risk of spill in the Campaspe system was below the 10 per cent threshold needed to make a low risk of spill declaration. A total of 15.6 GL returned to allocation accounts in the Campaspe system.

Loddon and Bullarook Systems

In accordance with the bulk entitlement rules, the Loddon system 2024/25 seasonal determination increased in line with the Goulburn system. The seasonal determination started 2024/25 at 69 per cent HRWS on 1 July and increased to 100 per cent HRWS on 16 September 2024.

The Bullarook system is the smallest of the GMW systems with two relatively small annual storages. The Bullarook system opened with a 0 per cent HRWS seasonal determination on 1 July 2024 due to below average winter and spring inflows. On 16 December 2024, the seasonal determination for the Bullarook system increased to 5 per cent HRWS. While the seasonal determination is only 5 per cent, water users have access to the allocation carried over from 2023/24. Dry inflow contingency measures such as reducing passing flows have been used to manage the available resource during winter and spring.

Ovens System

Despite entitlement holders having water shares, the Ovens system does not receive incremental seasonal determinations like the six other regulated systems operated by GMW. The system is managed similarly to an unregulated stream because of the high volume of inflows relative to storage size. Entitlement holders are restricted if the inflows into the system and the volumes held in Lake Buffalo and Lake William Hovell are insufficient to meet all demands in the system.

Entitlement holders are currently not restricted, as inflows into the system are meeting demands. The spillway gates were lowered at Lake Buffalo in July 2024 and the storage increased to 80 per cent of capacity. Due to low inflows, filling to 90 per cent of capacity occurred during August. The storage filled to 100 per cent of capacity in early October. Entitlement holders in the Ovens, Buffalo and King rivers currently have access to their spill-reliability entitlements. Access to the spill-reliability entitlements will cease later in the season once the storages commence fully regulated operations.

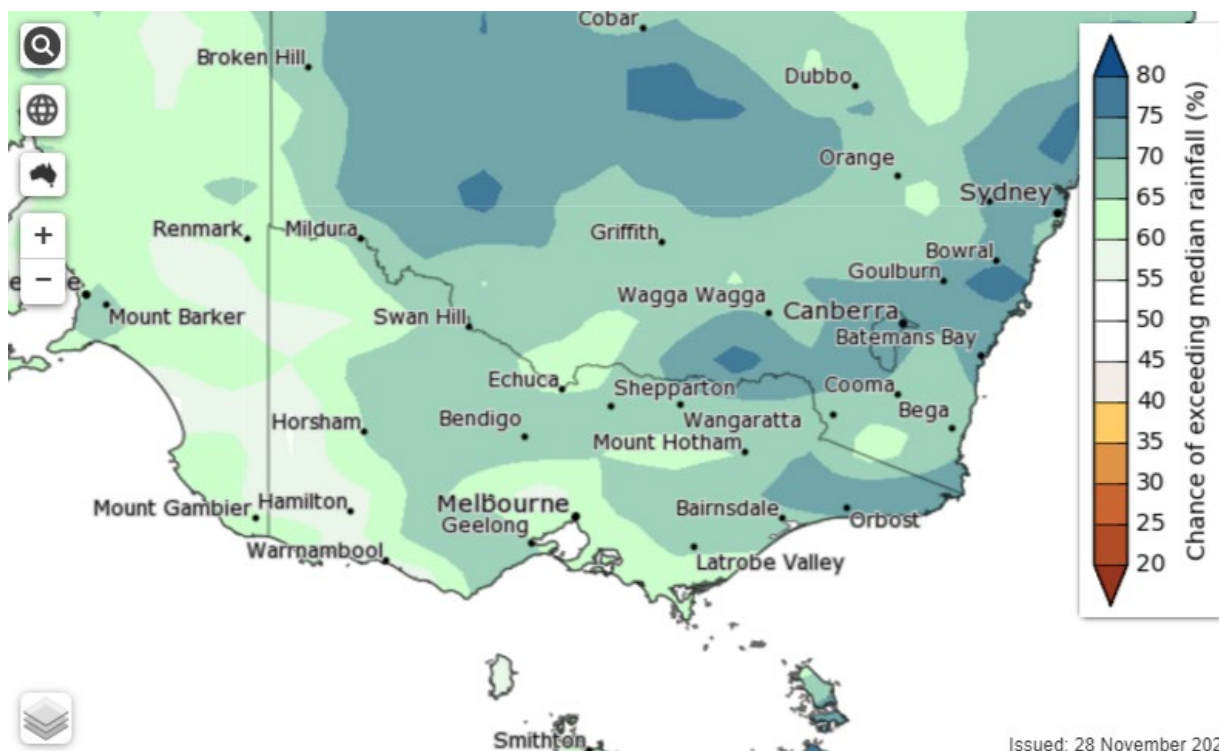
Outlook for remainder of 2024/25

The Bureau of Meteorology's three-month outlook for December 2024 to February 2025, issued on 24 October 2024, indicated the chances of exceeding the median rainfall over most of GMW's irrigation and catchment areas is between 60 and 70 per cent (Figure 2).

The Bureau of Meteorology's Climate Driver update issued on 26 November advised oceanic indicators exhibited a neutral El Niño-Southern Oscillation (ENSO) outlook. Atmospheric indices, such as those related to patterns of surface pressure, cloud and trade winds, are broadly consistent with an ENSO neutral state. Although some indices have displayed La Niña-like signals over recent months, a consistent and sustained shift in the atmosphere has not been observed. The Bureau's model suggests Sea-Surface Temperatures (SSTs) are likely to remain within the ENSO-neutral thresholds (-0.8 °C to $+0.8$ °C) throughout the forecast period to February 2025.

The Indian Ocean Dipole (IOD) has been below the negative IOD threshold (-0.40 °C) since mid-October. If the IOD index remains below the threshold for another week, it would indicate a negative IOD event is underway. However, all but one of the surveyed climate models indicate that the IOD index is expected to return to neutral levels in December, in line with the typical IOD event lifecycle.

Temperature and rainfall outlook updates are available from the Bureau of Meteorology website (www.bom.gov.au/climate/ahead/).



Issued: 28 November 2024

Figure 2. Chance of exceeding median rainfall for the period December 2024 to February 2025 (Source Bureau of Meteorology).

As detailed in Table 3, the Murray, Broken, Goulburn, Campaspe and Loddon systems have reached 100 per cent HRWS availability for the 2024/25 water year. Resource improvements in the Bullarook system will contribute to seasonal determination increases until seasonal determinations reach 100 per cent LRWS.

Inflows close to the long-term average are required to reach 100% HRWS by mid-February 2025 in the Bullarook system. Lower than estimated river operating and evaporation losses may contribute to resource improvements.

Broken and Campaspe entitlement holders will see LRWS seasonal determination increases if there is additional water available for allocation.

The necessary operating reserves for 2025/26 are yet to be established in the Murray and Goulburn systems. This resource position means a LRWS seasonal determination is unlikely in the Murray or Goulburn systems in 2024/25.

Entitlement holders in the Ovens system may experience restricted diversion access this water year if low storage inflows continue and water from the storages is needed to meet demand before the end of December. History indicates that restrictions are not needed to manage demand when the storages are still at capacity in January.

Irrigation and environmental water demand over the remaining months of the 2024/25 water year will determine storage levels heading into the next peak inflow period and how much allocation is carried over into 2025/26. As the volume available for delivery is high and the rainfall outlook does not favour wetter conditions, demand for water may remain strong.

Outlook for 2025/26

Reliable long-term weather outlooks for the start of 2025/26 are not available as the Bureau of Meteorology rainfall outlooks only cover three months. GMW, as Northern Victoria Resource Manager,

will release a detailed first outlook for the 2025/26 water year on 17 February 2025 using historical inflows (adjusted for conditions since 1975). The outlook will be updated on 15 May 2025.

If conditions are dry in 2025/26, dry inflow contingency measures may be required in the Broken and Bullarook systems.

Murray System

With this season's seasonal determination exceeding 50 per cent HRWS, the early season reserve volume has been set aside for 2025/26. This volume contributes to system operating requirements at the start of a water year to enable delivery of carryover from the start of the season. If extreme dry conditions are experienced for the rest of the water year, seasonal determinations are likely to be very low. Seasonal determinations will be available under dry inflow conditions but are unlikely to reach 100 per cent HRWS. Average inflow conditions should allow seasonal determinations to reach 100 per cent HRWS during spring 2025.

Goulburn System

As the Goulburn system seasonal determination reached 100 per cent HRWS on 15 October 2024, there are some reserves in addition to the early season reserve to support 2025/26 seasonal determinations. Average inflow conditions should allow seasonal determinations to reach 100 per cent HRWS during spring 2025. Seasonal determinations will be available under dry inflow conditions but are unlikely to reach 100 per cent HRWS.

Campaspe System

With the seasonal determination at 100 per cent HRWS and 47 per cent LRWS on 16 December 2024, all further resource improvements will go towards increasing LRWS seasonal determinations. There are reserves set aside for seasonal determinations in 2025/26 to open on 1 July 2025 at 100 per cent HRWS.

Loddon System

About 71 GL has been set aside for operating commitments 2025/26. Seasonal determinations in the Loddon system will be the same as the Goulburn system in 2025/26 if conditions allow. If inflows are insufficient in the Loddon system to maintain the same seasonal determination as the Goulburn system, the Loddon system seasonal determination will be lower than the Goulburn system.

Broken System

The Broken system is an annual system, so 2025/26 reserves will depend on use of water this water year, and the inflows during the traditional inflow months in winter and spring 2025. As the seasonal determination is 100 per cent HRWS and 100 per cent LRWS, all resource improvements will contribute to operating reserves for 2025/26.

Bullarook System

Like the Broken, the Bullarook system is an annual system, so 2025/26 reserves will depend on how much water is used this water year and the inflows during the traditional inflow months in 2025.

Ovens System

Water availability in the Ovens system depends on weather and streamflows, making it difficult to determine water availability in 2025/26. Restrictions are unlikely under wet and average inflow conditions but remain possible under drier scenarios.

Unregulated Systems

Current seasonal conditions

Unregulated streams are monitored in accordance with relevant Local Management Rules (LMRs) or Water Supply Protection Area (WSPA) management plans. Minimum streamflow requirements are outlined in LMRs and WSPA management plans. A minimum flow requirement of 3 ML/day is applied to streams that do not have an LMR.

If minimum flow requirements are not met, restrictions are put in place (Table 4). Restrictions range from Stage 1 Roster (access to 10 per cent of entitlement every 10 days) to Stage 5 suspension (only diversion for domestic and stock use is permitted). LMRs and the details of rosters and restrictions are available online at www.gmwater.com.au/water-resources/diversions.

Table 4. Stage 5 Suspensions on unregulated streams on 29 November 2024

Catchment	Stream	Suspension start date
Broken	Boosey Creek	11 January 2023
Kiewa	Bight Creek	30 December 2023
Murray	Black Dog Creek (Upper)	30 December 2023
Murray	Indigo Creek	20 November 2024
Goulburn	Faithfulls Creek	12 November 2024
Goulburn	Sunday Creek	6 November 2024
Campaspe	Axe Creek	25 October 2024
Campaspe	Campaspe River U/S Eppalock	13 November 2024
Campaspe	Cornella Creek	1 November 2023
Campaspe	Emu Creek	25 October 2024
Campaspe	Falls Creek	13 November 2024
Campaspe	Five Mile Creek	13 November 2024
Campaspe	Jones Creek	13 November 2024
Campaspe	Little Coliban River	13 November 2024
Campaspe	Mclvor Creek	28 October 2024
Campaspe	Mt Ida Creek	28 October 2024
Campaspe	Sheep Wash Creek	25 October 2024
Campaspe	Smiths Creek	16 November 2023
Campaspe	Smokers Creek	13 November 2024
Campaspe	Stony Creek	6 November 2023
Campaspe	Sweenies Creek	25 October 2024
Campaspe	Wanalta Creek	8 November 2016
Loddon	Adekate Creek	5 November 2024
Loddon	Back Creek	13 October 2023
Loddon	Bannacher Creek	5 November 2024
Loddon	Barkers Creek	5 November 2024
Loddon	Bet Bet Creek	5 March 2024
Loddon	Bullarook Creek	5 November 2024
Loddon	Bullock Creek	5 March 2024
Loddon	Coghills Creek	13 October 2023
Loddon	Creswick Creek	19 February 2024
Loddon	Larni Barramul Yaluk Creek	5 November 2024
Loddon	Joyces Creek	5 November 2024
Loddon	Langdons Creek	5 November 2024
Loddon	Loddon River D/S Fernihurst Weir	5 November 2024
Loddon	McCallums Creek	13 October 2023
Loddon	Muckleford Creek	19 February 2024
Loddon	Penny Royal Creek	5 November 2024
Loddon	Pinchgut Creek	5 November 2024

Loddon	Rocky Lead Creek	5 November 2024
Loddon	Sailors Creek	5 November 2024
Loddon	Slattery Creek	19 February 2024
Loddon	Slaty Creek	5 November 2024
Loddon	Twelve Mile Creek	5 November 2024
Loddon	Wombat Creek	5 November 2024
Loddon	Yandoit Creek	5 November 2024

Outlook for remainder of 2024/25

The Bureau of Meteorology has forecast an even chance of exceeding the median rainfall across northern Victoria throughout summer, which will likely result in reduced streamflows and an increase in restrictions. Smaller tributary streams will experience restrictions.

The Bureau of Meteorology current seasonal streamflow forecast predicts low streamflows for November 2024 to January 2025 across the GMW region due to dry and unusually warm conditions. (www.bom.gov.au/water/ssf/).

Upper Murray Catchment

- The Bureau of Meteorology predicts that flows are likely to be low and there is a 60 per cent chance of exceeding median rainfall in the Upper Murray catchment from December 2024 to February 2025
- No restrictions are forecast for the main stem of the unregulated Murray River and the Mitta Mitta River above Lake Hume
- Tributaries will most likely experience restrictions during the summer of 2025

Kiewa Catchment

- The Bureau of Meteorology predicts low flows and a 60 per cent chance of exceeding median rainfall in the Kiewa catchment between December 2024 and February 2025
- No restrictions are forecast for the Kiewa main stem while some smaller tributaries will experience restrictions during the summer of 2025

Ovens Catchment

- The Bureau of Meteorology predicts low flows and a 60 per cent chance of exceeding median rainfall in the Ovens catchment between December 2024 and February 2025
- Restrictions are likely for the main stem of the Ovens River upstream of Myrtleford during the 2025 summer
- Small tributaries will experience restrictions during summer of 2024/25.

Goulburn Catchment

- The Bureau of Meteorology predicts low flows and a 60 per cent chance of exceeding median rainfall in the Goulburn catchment between December 2024 and February 2025
- Restrictions are likely for the main tributaries which flow into the Goulburn River upstream of Seymour
- Small tributaries will experience restrictions

Broken Catchment

- The Bureau of Meteorology predicts low flows and around 60 per cent chance of exceeding median rainfall in the upper parts of the Broken catchment between December 2024 and February 2025

- The Broken River tributaries will experience restrictions

Campaspe Catchment

- The Bureau of Meteorology predicts low flows and a 60 per cent chance of exceeding median rainfall in the Campaspe catchment between December 2024 and February 2025
- The Upper Campaspe, Coliban and all tributaries will experience restrictions

Loddon Catchment

- The Bureau of Meteorology predicts low flows and a 60 per cent chance of exceeding median rainfall in the Loddon catchment between December 2024 and February 2025
- The Loddon River upstream of Cairn Curran Reservoir and most tributaries will experience restrictions

Outlook for 2025/26

Access to unregulated systems in 2025/26 will depend on weather conditions (Table 5).

Table 5. Unregulated systems outlook for 2025/26

Catchment	Very Dry weather conditions (flows are less than expected in 95 out of 100 years)	Dry weather conditions (flows are less than expected in 75 out of 100 years)	Average weather conditions (flows are less than expected in 50 out of 100 years)
Broken	All streams on suspension.	All minor tributaries on suspension.	All minor tributaries on restriction or suspension.
Kiewa	All minor tributaries on suspension. Kiewa River on restriction.	All minor tributaries on suspension. Kiewa River on restriction.	All minor tributaries on restrictions.
Upper Murray	All minor tributaries on suspension. Upper Murray River on restriction.	All minor tributaries on suspension. Upper Murray River on restriction.	All minor tributaries on restrictions.
Ovens	All minor tributaries on suspension. Upper Ovens River and larger tributaries on restriction.	All minor tributaries on suspension. Upper Ovens River and major tributaries on restriction.	All minor tributaries on restrictions. Tributaries of the Upper Ovens to be on the same level of restriction as the Ovens main stem above Myrtleford. Several smaller tributaries on suspension.
Goulburn	All minor and major tributaries on restriction or suspension.	All minor tributaries on suspension. All major Goulburn tributaries on restriction.	Most minor tributaries on restriction or suspension.
Campaspe	All streams on suspension.	All streams on suspension.	All tributaries and the Upper Campaspe on restriction or suspension.
Loddon	All streams on suspension.	All streams on suspension.	All tributaries and the Upper Loddon on restriction or suspension.

Note: worst conditions on record are defined as instream flows that are greater in 95 years out of 100, dry conditions are greater 75 out of 100 years, average conditions are inflow volumes to major storages

that are greater in 50 years out of 100 and wet conditions are inflow volumes to major storages that are greater in 10 years out of 100).

Groundwater

Current seasonal conditions

Currently, groundwater licence holders in the Lower Campaspe Valley WSPA are on 75 per cent allocation in the Barnadown Zone. The remaining Groundwater Management Units have access to 100 per cent of their entitlement (Table 6).

Table 6. Groundwater allocation for 2024/25

Groundwater Management Unit (GMU)	2024/25 Allocations (% Licensed Volume)
Barnawartha GMA	100%
Broken GMA	100%
Central Victorian Mineral Springs GMA	100%
Eildon GMA	100%
Katunga WSPA	100%
Kiewa GMA	100%
Loddon Highlands WSPA	100%
Lower Campaspe Valley WSPA	
- Barnadown Zone	75%
- All other Zones	100%
Lower Ovens GMA	100%
Mid Goulburn GMA	100%
Mid Loddon GMA	100%
Shepparton Irrigation GMA	100%
Strathbogie GMA	100%
Unincorporated GMU	100%
Upper Goulburn GMA	100%
Upper Murray GMA	100%
Upper Ovens WSPA	100%
West Goulburn GMA	100%

*WSPA = Water Supply Protection Area; GMA = Groundwater Management Area

Outlook for remainder of 2024/25

Groundwater use and trading activity is likely to be above average in the 2024/25 season due to forecasts of an even chance of exceeding the median rainfall and above average temperatures across northern Victoria in late 2024 and early 2025.

Outlook for 2025/26

Groundwater recovery and drawdown levels in northern Victoria are dependent on rainfall recharge and groundwater extraction. The predicted above average groundwater use in 2024/25, coupled with below average rainfall across the region, is expected to cause a reduction in groundwater levels across all aquifers. After strong groundwater recharge in 2022/23 and 2023/24, groundwater levels across northern Victoria are expected to record minor water level reductions.

Groundwater levels in the Loddon Highlands WSPA and Lower Campaspe Valley WSPA will be closely monitored with the impact of allocations on the resource (Table 7).

Table 7. Groundwater outlook for 2025/26

Catchments	Groundwater Management Unit	Groundwater level outlook	Allocations outlook
Loddon/ Campaspe	Central Victorian Mineral Springs GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Mid Loddon GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Loddon Highlands WSPA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100% for all zones apart from Newlyn and Blampied zones which may be 75%
	Lower Campaspe Valley WSPA	Seasonal drawdown and recovery likely to reduce water levels with expected increase in usage	75% allocation for Barnadown zone. 100% allocation all other zones.
Goulburn/ Broken/ Mid Murray	Broken GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Eildon GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Katunga WSPA	Seasonal drawdown and recovery likely to reduce water levels.	Remain at 100% allocation Dependent on 5 year rolling average
	Mid Goulburn GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Shepparton Irrigation GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Strathbogie GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Upper Goulburn GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	West Goulburn GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
Kiewa/ Ovens/ Upper Murray	Barnawartha GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Kiewa GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Lower Ovens GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
	Upper Murray GMA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%

	Upper Ovens WSPA	Seasonal drawdown and recovery likely to reduce water levels	Remain at 100%
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Surface Water Quality

Current seasonal conditions

No blue green algae (BGA) recreational warnings were current in any GMW waterbody at 29 November 2024. The most recent BGA warning was in place for Hepburn Lagoon, which was removed in September 2024. The warning for Lake Eildon was removed in July 2024, after being in place for nearly 3 months.

The elevated nutrient and turbidity levels reported in some storages and catchments last year have mostly declined to more usual levels.

Outlook for 2025/26

Current water quality results do not suggest an elevated risk of BGA, although BGA behaviour is very unpredictable.

Hypoxic blackwater events remain a possibility throughout summer but are highly dependent on the location and intensity of rainfall events.

High salinity in water systems is unlikely to occur under the current and expected water resource position.

The occurrence of elevated blue green algae or hypoxic blackwater events is unlikely to affect GMW's supply to rural customers, as the phenomena are not considered harmful to irrigated agriculture. However, both events can impact aquatic life, town water supplies and recreational use of water bodies. Current blue green algae warnings in GMW water bodies can always be found on our website www.gmwater.com.au/news/bga along with links to further information.

Information Updates

GMW update seasonal determinations on the 1st and 15th of each month, or next business day, until all seasonal determinations are 100 per cent HRWS. Seasonal determinations are then updated on the 15th of each month, or next business day until all seasonal determinations are 100 per cent LRWS.

The first outlook for 2025/26 seasonal determinations will be issued on 17 February 2025 and updated on 15 May 2025. The first seasonal determination announcement for 2025/26 will be on 1 July 2025.

All resource management updates can be located on the Northern Victoria Resource Manager website at www.nvrm.net.au.

Information about stream rosters and restrictions (www.gmwater.com.au/water-resources/diversions/rosters-and-restrictions) and groundwater allocations (www.gmwater.com.au/water-resources/ground-water) are available on the GMW website.