



Annual Water Outlook

Urban & Rural

November 2024

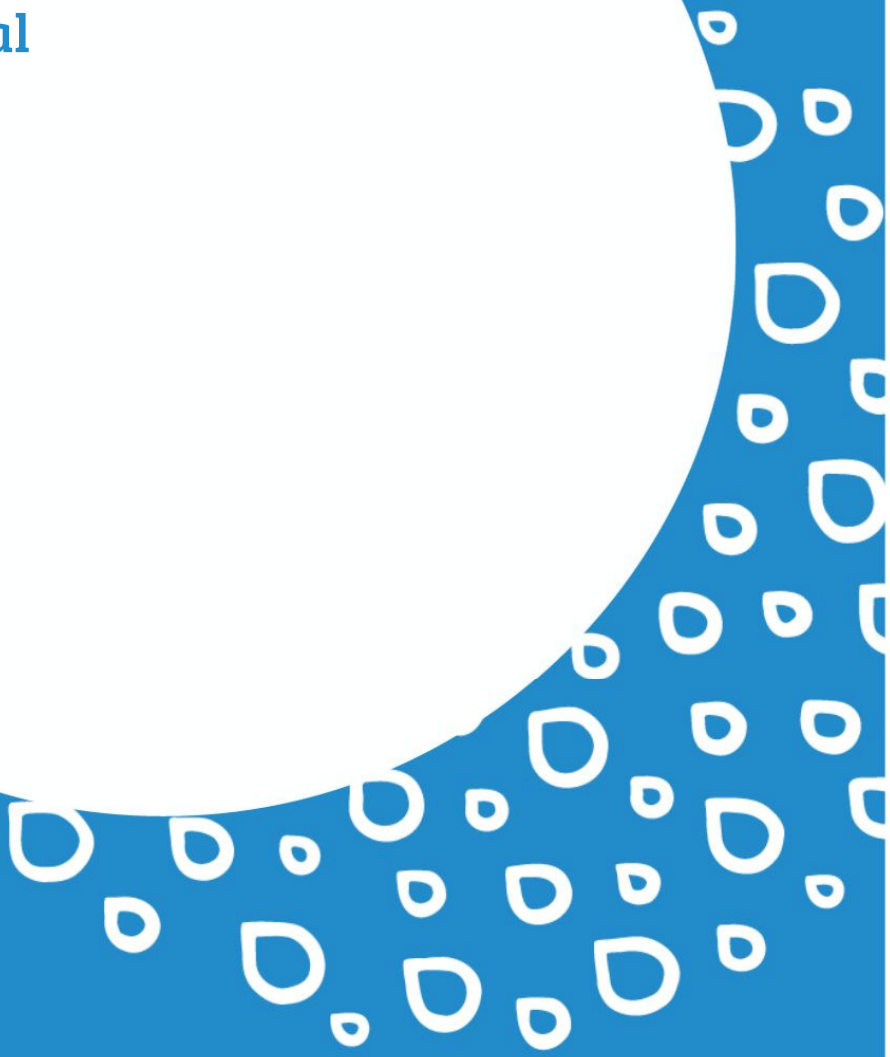


Table of Contents

Acknowledgement of Country	3
Executive Summary	4
1 Introduction	5
1.1 Purpose	5
1.2 Coliban Water	5
2 Water resource position	7
2.1 Rainfall	7
2.2 Storage inflows	7
2.3 Storage volume	8
2.4 Demand comparison	10
3 Climate outlook	12
3.1 Rainfall and temperature	12
3.2 Victorian climate and streamflow in the longer-term context	13
4 Water supply outlook	14
4.1 Forecasts	14
4.2 Campaspe Water Supply System	15
4.3 Coliban North Water Supply System	17
4.4 Coliban South Water Supply System	20
4.5 Elmore Water Supply System	23
4.6 Goulburn Water Supply System	25
4.7 Loddon Wimmera Water Supply System	27
4.8 Murray Water Supply System	30
4.9 Trentham Water Supply System	32
Appendix A	35

Acknowledgement of Country

We respectfully acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners and custodians of the land and water on which all Australians rely. We pay our respects to Djaara, Taungurung, Yorta Yorta, Barapa Barapa, their Elders past, present and future, as Traditional Owners and the custodians of the land and water on which we operate and rely.

We acknowledge and respect the continued cultural, social and spiritual connections of all Aboriginal Victorians. We also acknowledge the broader Aboriginal and Torres Strait Islander community and their connections with lands and waters and recognise and value their inherent responsibility to care for and protect them for thousands of generations.

We acknowledge Aboriginal Victorians as Traditional Owners and, in the spirit of reconciliation, we remain committed to working in partnership with Traditional Owners to ensure meaningful, ongoing contributions to the future of land and water management. We commit to empower Aboriginal peoples, wherever our actions impact their lives, by firstly coming to them. We will not form a view until we have heard their view. We will ensure that the aspirations of Aboriginal peoples are embedded in our business. We recognise we have much work to do to make this a reality.

Executive Summary

Our current water resource position is good. While rainfall and inflows to our storages have been below average over winter and spring, we are holding 82% of our total storage capacity due to high inflows received in recent years. In addition, we have received 100% allocation for all entitlements except the Wimmera-Mallee Pipeline (15%), and we carried over unused allocation from 2023/24.

Given the good resource position and forecast average rainfall the likelihood of restrictions over the next 12 months is rare to very rare, noting that there are risks such as asset failure or water quality issues that could result in the need to manage demand (Table 1).

Table 1 Water Supply System likelihood of restrictions

Water Supply System	Towns supplied	Source of supply	Likelihood of restrictions
Campaspe	Goornong, Rochester	Campaspe River	Very Rare
Coliban Northern	Bendigo, Axedale, Huntly, Marong, Raywood, Sebastian, Heathcote, Tooborac	Lake Eppalock Coliban River reservoirs Waranga Western Channel	Very Rare
Coliban Southern	Castlemaine, Harcourt, Taradale, Elphinstone, Fryerstown, Chewton, Campbells Creek, Guildford, Newstead, Maldon, Kyneton, Malmsbury, Tylden	Coliban River reservoirs	Very Rare
Elmore	Elmore	Groundwater	Very Rare
Goulburn	Rochester, Lockington, Serpentine, Pyramid Hill, Boort, (Dingee, Mitiamo, Jarklin, Mysia, Macorna)	Waranga Western Channel	Very Rare
Loddon - Wimmera	Bridgewater, Inglewood, Laanecoorie, Tarnagulla, Bealiba, Dunolly, Korong Vale, Wedderburn (Borong, Wychitella)	Wimmera Mallee Pipeline South West Loddon Pipeline Loddon River	Very Rare
Murray	Echuca, Cohuna, Gunbower, Leitchville	Murray River	Rare
Trentham	Trentham	Spring fed reservoir Groundwater	Rare

Permanent Water Saving Rules continue to apply in all water supply systems. In the rural systems, we have announced a 100% allocation for 2024/25.

Our [Urban Water Strategy 2022](#) considers the key challenges of climate change and population growth and identifies the best mix of actions to provide water now and into the future. In 2023/24 we continued with programs to reduce demand including digital metering, leak identification and repair and promoting programs such as Target Your Water Use, which is a Victorian Government water efficiency program for regional Victorian householders.

We have progressed key water security actions identified by the Minister including an increase in Class A recycled water production at Bendigo Water Reclamation Plant, and investigations for a pipeline between our Murray and Goulburn water supply systems. In addition, we have undertaken the following works to improve water security:

- Groundwater investigations at Carlsruhe and Tylden to provide an alternative supply for Kyneton
- Purchase of water shares for the Murray and Coliban North water supply systems
- Increased water storage capacity at Trentham, Mitiamo and Laanecoorie
- Progressed the development of a detailed business case for rural water efficiency
- Progressed the development of recycled water and water security strategies
- Planning to connect Goornong to the Bendigo network

1 Introduction

1.1 Purpose

This Annual Water Outlook has been prepared, as required under the Statement of Obligations (2015), and in accordance with guidelines issued by the Department of Energy, Environment and Climate Action, to provide information on:

- a) the current water resource position;
- b) a forward outlook for water resources over the coming year under a range of plausible climatic scenarios;
- c) whether agreed levels of service will be met under these climatic scenarios; and
- d) if not, what actions will be undertaken to improve system performance so that these agreed levels of service can be met.

The aim of the Annual Water Outlook is to keep customers, stakeholders and the community informed about the current and projected 12-month status of water supplies, including any contingency plans for responding to potential water shortages.

1.2 Coliban Water

Coliban Water provides water and wastewater services to 49 towns in North-Central Victoria, extending from Cohuna and Echuca in the north to Kyneton and Trentham in the south, and from Boort, Wedderburn, Bealiba and Dunolly in the west to Heathcote and Tooborac in the east (Figure 1). As at 30 June 2024, there were 81,639 water connections.

We also supply untreated water to over 1,300 customers on our rural system that are licensed to extract up to 15.7 GL.

We manage a number of water supply systems, each defined by their primary water source, namely:

- Campaspe
- Coliban Northern
- Coliban Southern
- Elmore
- Goulburn
- Loddon Wimmera
- Murray
- Trentham

In some cases, there are multiple water sources that supply a system as part of the Victorian water grid, which connects water sources via pipelines, channels, creeks and rivers.



Figure 1 Coliban Water region

2 Water resource position

2.1 Rainfall

Rainfall received at Malsbury Reservoir is representative of rainfall trends in the catchment that result in inflows to our major storages on the Coliban River. Rainfall received at Malsbury Reservoir for 2023/24 was 619 mm, which is below the post-1975 climate reference period median of 711 mm (Figure 2).

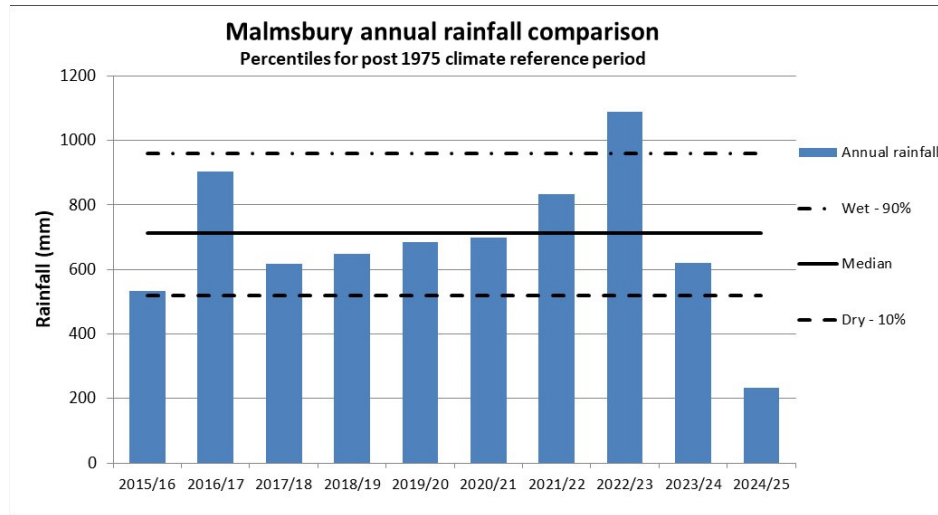


Figure 2 Annual rainfall received at Malsbury Reservoir compared to post-1975 climate reference period

We have received 232 mm of rainfall at Malsbury Reservoir to 18 November in 2024/25, which is below average (Figure 3). Winter and spring rainfall can provide good inflows to our reservoirs, and summer and autumn rainfall can dampen demand.

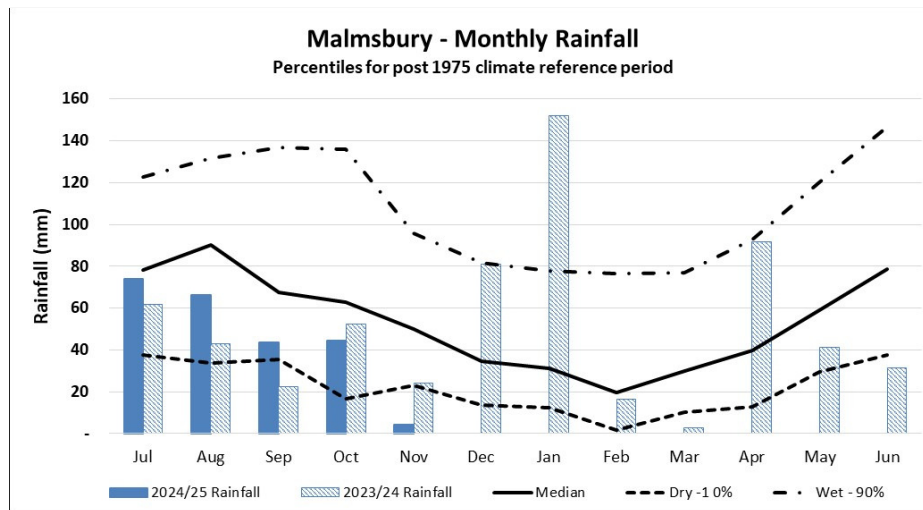


Figure 3 Monthly rainfall at Malsbury Reservoir compared to average monthly rainfall for post-1975 climate reference period

2.2 Storage inflows

Inflows to the Coliban Headwork Storages (comprising the Upper Coliban, Lauriston and Malsbury Reservoirs) during 2023/24 was 28.6 GL. This is well below the median inflow of 48 GL for the post-1975 historic climate reference period (Figure 4).

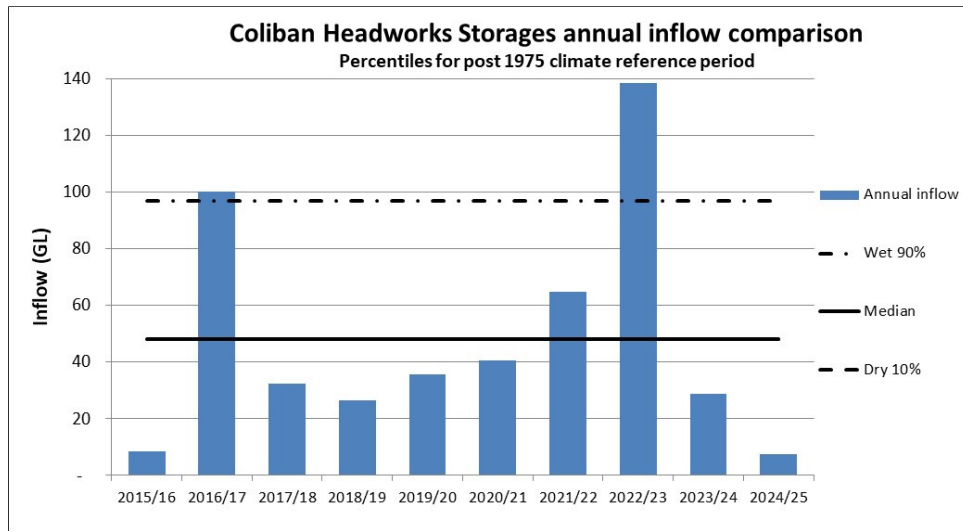


Figure 4 Annual inflows to the Coliban Headwork Storages compared to post-1975 climatic reference period

We have only received 7.5 GL of inflow to the Coliban Headwork Storages to 18 November in 2024/25 in response to below average rainfall (Figure 5). As most inflows are typically received between July and October it suggests that inflows are likely to be well below average in 2024/25.

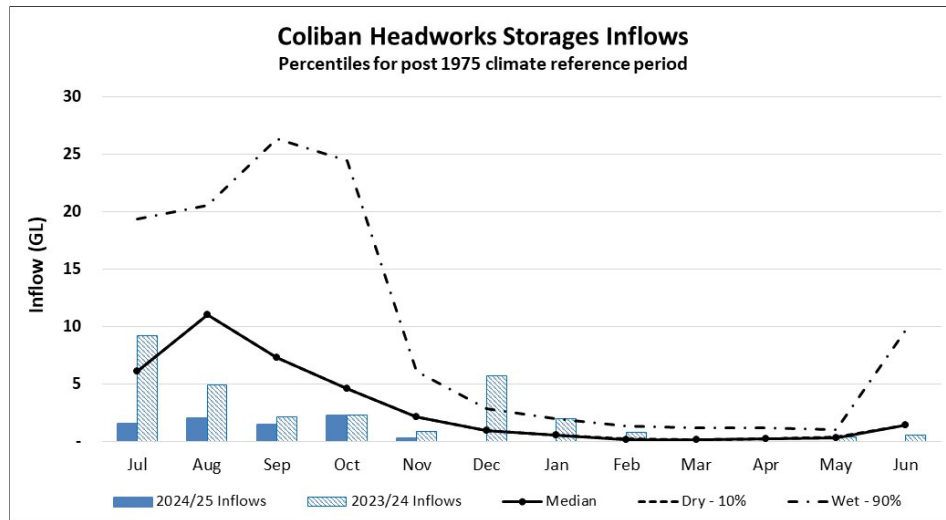


Figure 5 Monthly inflows to the Coliban Headwork Storages compared to the post-1975 climatic reference period

2.3 Storage volume

The Coliban Headwork Storages (comprising the Upper Coliban, Lauriston and Malmsbury Reservoirs) and Coliban Water’s share of Lake Eppalock were filled to capacity in July 2023. The Coliban Headwork Storages were drawn down to 75% of capacity (52 GL); and Coliban Water’s share of Lake Eppalock was drawn down to 95% of capacity (52.2 GL) during 2023/24 (Figure 6).

There has been little recovery of water levels in the Coliban Headwork Storages over spring. Our share of Lake Eppalock has remained high as we have not had to draw from these reserves.

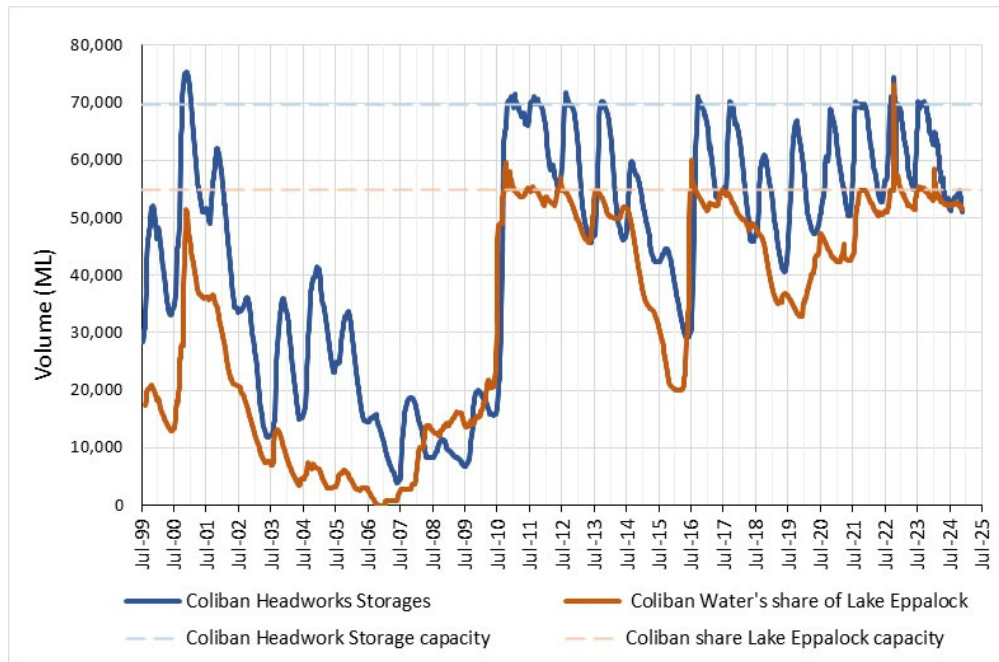


Figure 6 Coliban Headwork Storages combined storage volume and Coliban Water Share of Lake Eppalock

The total volume held in storage on 18 November 2024 was 108.2 GL, which is 82% of total capacity (Table 2). Reservoir level information can be found at: <https://coliban.com.au/about-us/our-reservoirs>

Table 2 Coliban Water storage volume

Storage	Capacity (ML)	18 November 2024 (ML)	% Capacity
Upper Coliban	37,770	31,299	83%
Lauriston	19,790	15,810	80%
Malmsbury	12,034	3,978	33%
Sub-total	69,594	51,087	73%
Coliban Water share of Lake Eppalock	54,837	51,516	94%
Barkers Creek	1,690	665	39%
McCay	1,360	1,184	87%
Caledonia	214	196	92%
Sandhurst	2,590	2,168	84%
Spring Gully	1,680	1,301	77%
Trentham 1 & 2	90	90	100%
Total	132,055	108,207	82%

Allocations

Allocations vary between water sources and the type of entitlement. Allocations can increase progressively throughout the year as the resource position improves. The Northern Victorian Resource Manager has announced allocations of 100% for high reliability water shares in the Goulburn, Loddon, Campaspe and Murray Systems. Allocations for the Wimmera Mallee Pipeline Product were only 15% as of 8 November 2024. Refer to Appendix A for detailed information on our water holdings.

Carryover and trade

We can carryover in all our water supply systems except the Coliban Southern and Trentham Systems. We carried over 13 GL into 2024/25 to ensure that our reserve rules were satisfied.

We plan to carryover sufficient volume so that, when combined with allocations and storage volumes, we shall have sufficient reserves to meet demands in the following year.

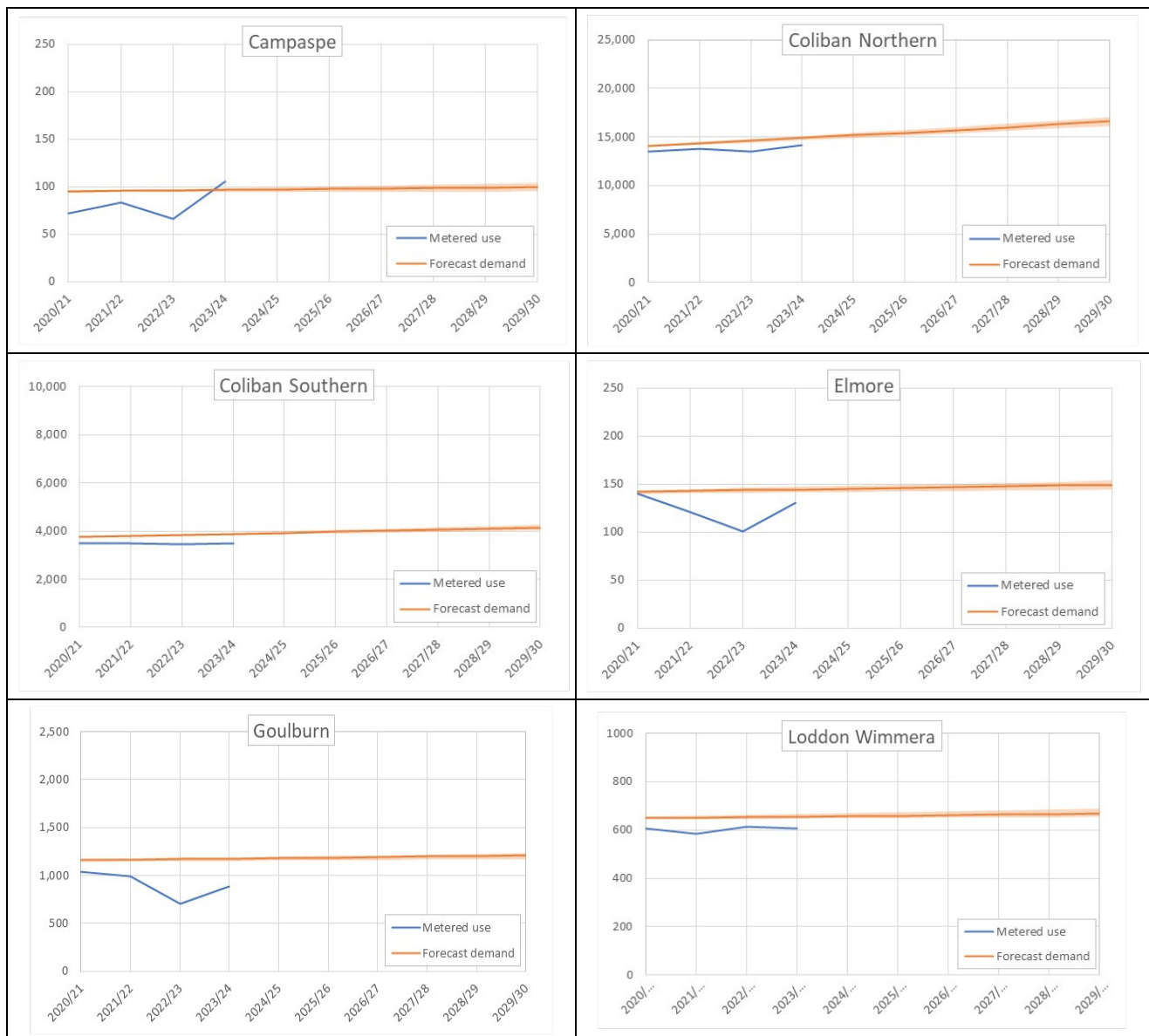
We have entitlements in a number of different water markets and can trade between water supply systems to secure supply.

Risk of spill

Where we hold greater than 100% of surface water entitlement due to carryover the volume is quarantined in a spillable water account until the Resource Manager declares a low risk of spill, or the storage spills.

2.4 Demand comparison

Annual demand has generally been below that forecast in our Urban Water Strategy 2022 for median growth, but within the range of expected variation (Figure 7). The lower demand is largely due to the climatic conditions dampening demand, including above average rainfall and flooding in 2021/22 and 2022/23, and high summer rainfall in 2023/24.



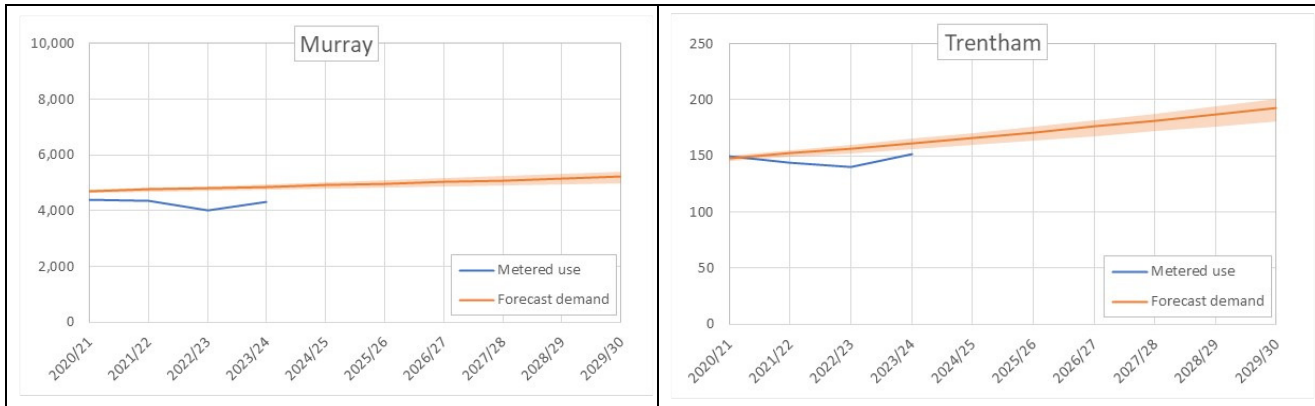


Figure 7 Metered use compared to forecast demand from our Urban Water Strategy 2022

3 Climate outlook

3.1 Rainfall and temperature

The Bureau of Meteorology climate outlook suggests that it is going to be warmer and wetter than average over the coming months (Figure 8 and Figure 9).

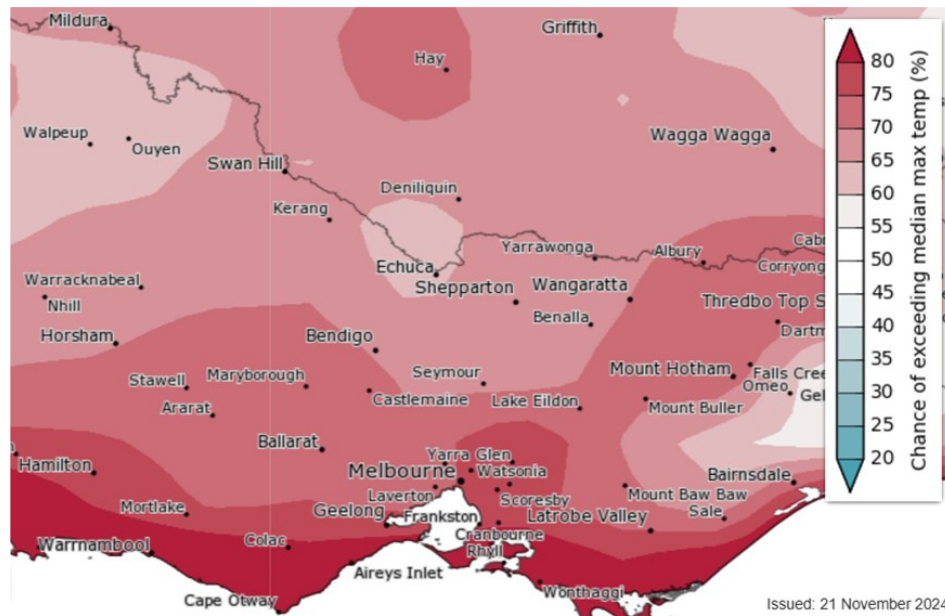


Figure 8 Chance of above median maximum temperature for December 2024 to February 2025

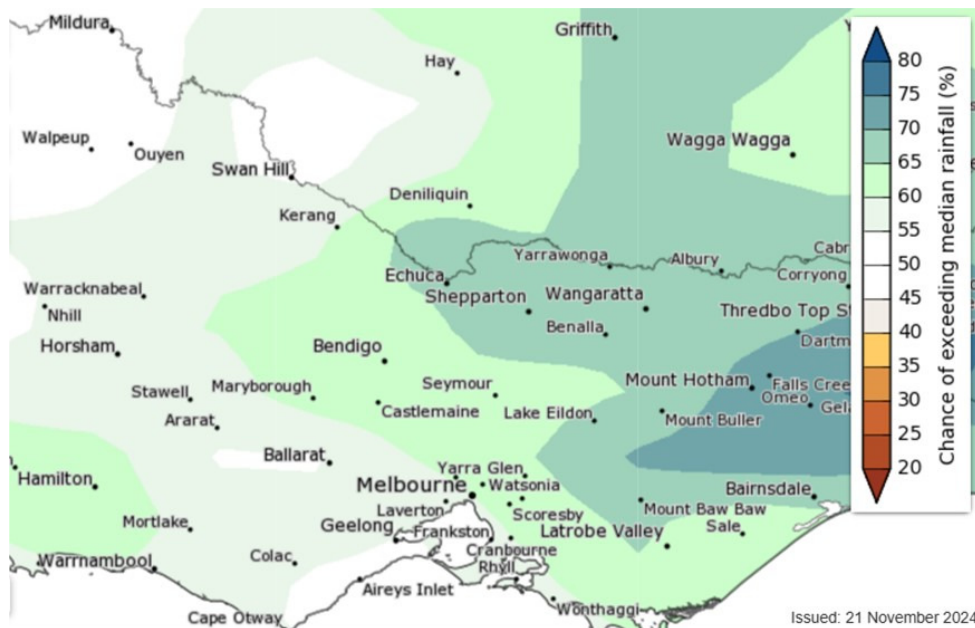


Figure 9 Chance of above median rainfall for December 2024 to February 2025

The Bureau of Meteorology climate driver update (accessed 21 November 2024) report that:

- the El Niño–Southern Oscillation (ENSO) is neutral.
- The Indian Ocean Dipole (IOD) is currently neutral.

3.2 Victorian climate and streamflow in the longer-term context

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

Over recent decades we have experienced trends toward:

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

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 getting less rainfall from low-pressure and frontal systems.

Over future decades we 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; and
- 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:

<https://www.water.vic.gov.au/our-programs/climate-change-and-victorias-water-sector/hydrology-and-climate-science-research/victorian-water-and-climate-initiative>

4 Water supply outlook

4.1 Forecasts

The likelihood of restrictions over the next 12 months is informed by the current resource position, the climate outlook, forecast supply (i.e., future inflows, allocations) and demands and other risks (i.e., water quality or asset failure). It is assessed as being either very rare, rare, unlikely, possible, likely or almost certain.

As detailed in the preceding chapters, the current water resource position is good, and the climate outlook suggests that we can expect close to average rainfall over the coming months.

Forecast inflows are based on average (50th percentile), dry (10th percentile) and worst annual inflow on record for the Coliban Headwork Storages, Lake Eppalock, and Trentham Reservoirs (Table 3).

Table 3 Inflows

Reservoirs	Average inflow (ML)	Dry inflow (ML)	Worst inflow (ML)
Coliban Headwork Storages (1975-2023)	48,068	14,795	3,672 in 2006/07
Coliban share Lake Eppalock (1999-2023)	9,898	2,526	588 in 2006/07
Trentham (calculated)	120	96	72

Forecast allocations provided by the [Northern Victorian Resource Manager](#) of 100% allocation in 2024/25 for the Campaspe, Goulburn and Murray systems have already been realised. Similarly, forecasts from the [Grampians Wimmera Mallee Water Storage Manager](#) have been also been realised and there is unlikely to any further significant increase.

Forecast allocations for 2025/26 are not available until February 2025. In the absence of this information allocations are assumed based on the current water resource position and reservoir levels. Major storages in the regulated Campaspe (Lake Eppalock), Murray (Dartmouth) and Goulburn (Lake Eildon) Systems are currently above 80% capacity.

Given the resource position, for average conditions we can expect good allocations in 2025/26 (Table 4). For dry conditions, reduced allocations have been estimated in each system representing a shift from an average year to a dry year. The lowest allocation on record has been adopted to represent the worst-case scenario.

Table 4 Forecast allocations

Source	2024/25 forecast allocation 2024		2025/26 estimated allocation		Worst case
	Average	Dry	Average	Dry	
Campaspe	100%	100%	100%	50%	0% in 2006/07
Goulburn & Loddon	100%	100%	100%	70%	29% in 2006/07
Murray	100%	100%	100%	80%	35% in 2008/09
Wimmera-Mallee Pipeline	14%	9%	50%	30%	16% in 2015/16
Lower Campaspe Valley	100%	100%	75%	50%	50%
Central Victorian Mineral Springs	100%	100%	100%	100%	100%

Demand is estimated as the 3-year average demand. For dry and worst-case scenarios, demand is estimated to increase by around 20%.

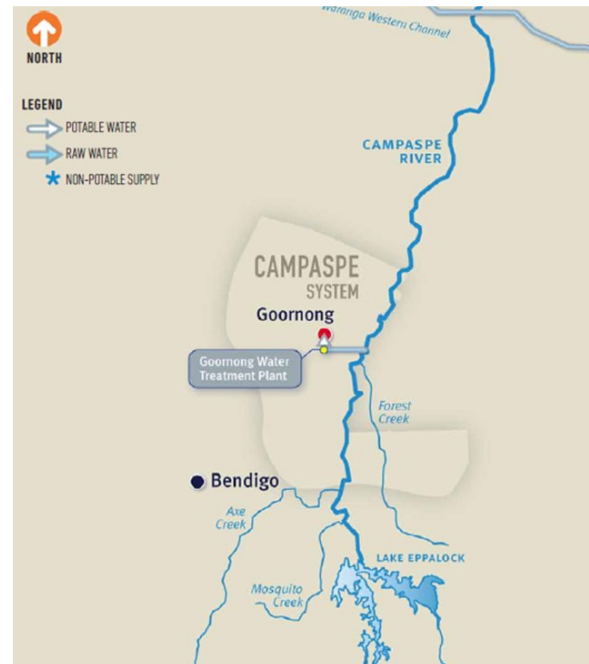
The water supply outlook and likelihood of restrictions is assessed for each water supply system in the following sections.

4.2 Campaspe Water Supply System

Towns supplied:	Goornong
Water connections:	200
Approx. Population:	718
Water Sources:	Campaspe River

Flows in the Campaspe River are managed by Goulbourn-Murray Water with releases from Lake Eppalock.

We receive a minimum 50% allocation under our bulk entitlement, which is sufficient to meet system demands.

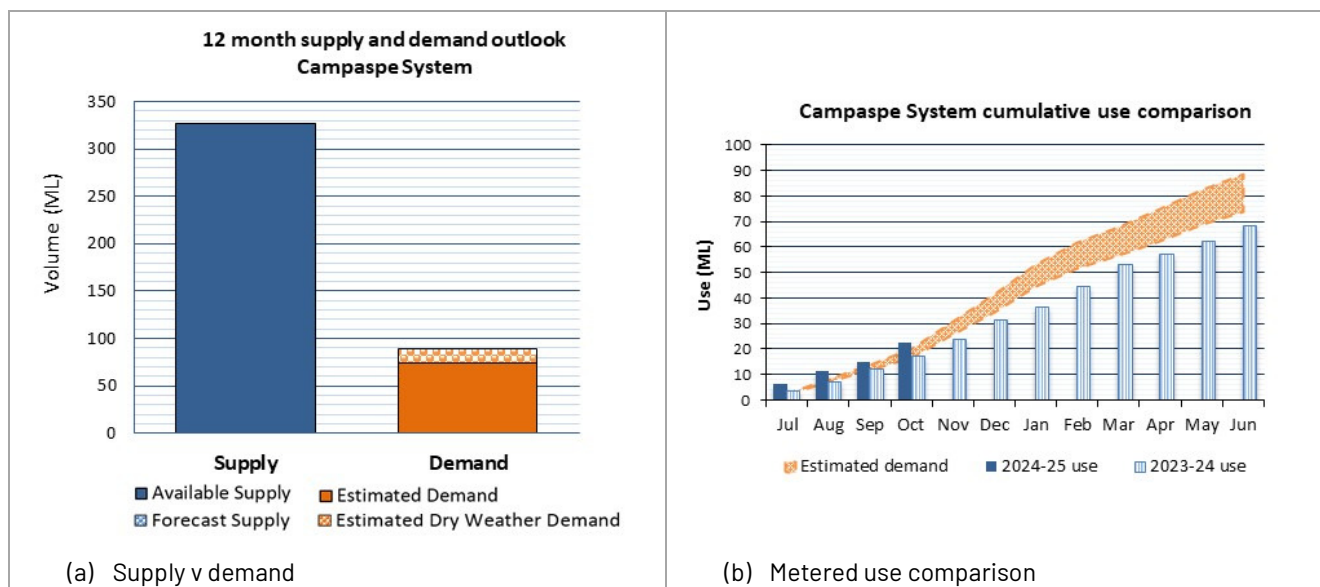


Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
326 ML	0 ML	73 ML	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations. Forecast supply is the available water plus anticipated further allocations. We aim to maintain 12 months' supply in the Campaspe System before restrictions may be triggered.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

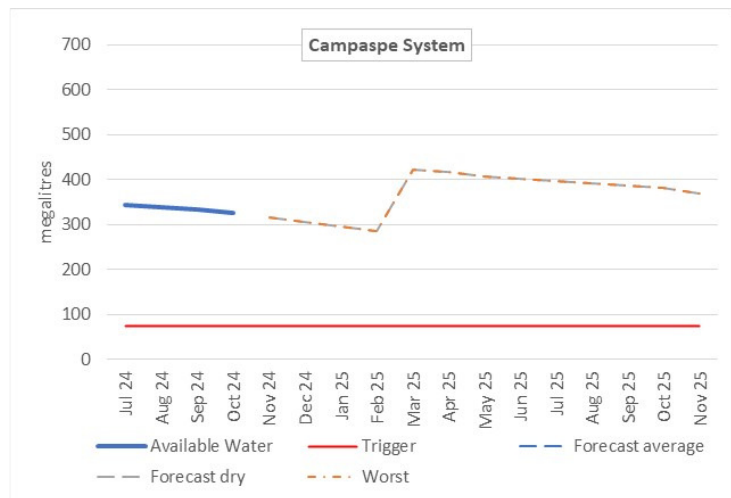


Water outlook

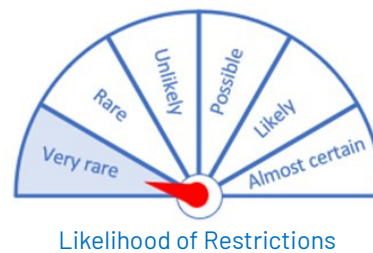
Our current water resource position is very good with 100% allocation.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 12 months' supply over the coming year.



The likelihood of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

Action	Timing	Status	Comments
Investigate groundwater as a source for Goornong	2022	Complete	We undertook a desktop hydrogeological investigation and a groundwater sampling program to identify the best sites for drilling. We installed a bore and identified a high yielding aquifer, but the water salinity was marginal. No further work is proposed currently.
Investigate demand initiatives such as water efficiency measures and leak detection to reduce non-revenue water	Ongoing	On track	We continued with programs to reduce demand including digital metering, leak identification and repair and promoting programs such as Target Your Water Use, which is a Victorian Government water efficiency program for regional Victorian householders. It offers advice and activities to encourage the efficient use of water.

We have commenced planning to extend our potable water network from Bendigo to Goornong.

4.3 Coliban North Water Supply System

Towns supplied:	Bendigo, Axedale, Huntly, Raywood, Sebastian, Heathcote, Tooborac
Water connections:	53,306
Approx. Population:	127,339
Rural customers:	676
Rural licence volume:	5,462 ML
Water Sources:	Coliban Headwork Storages Lake Eppalock Waranga Western Channel



Heathcote and Tooborac are typically supplied from Lake Eppalock. We take water from Malsbury Reservoir via the Coliban Main Channel to supply Bendigo and surrounding towns when there is sufficient supply. We change the source of supply to Lake Eppalock when necessary to maintain reserves in the Coliban River reservoirs for the Coliban Southern System. We may also source water from the Waranga Western Channel, which is managed by Goulburn-Murray Water, via the Goldfields Superpipe.

Water resource position 1 November 2024

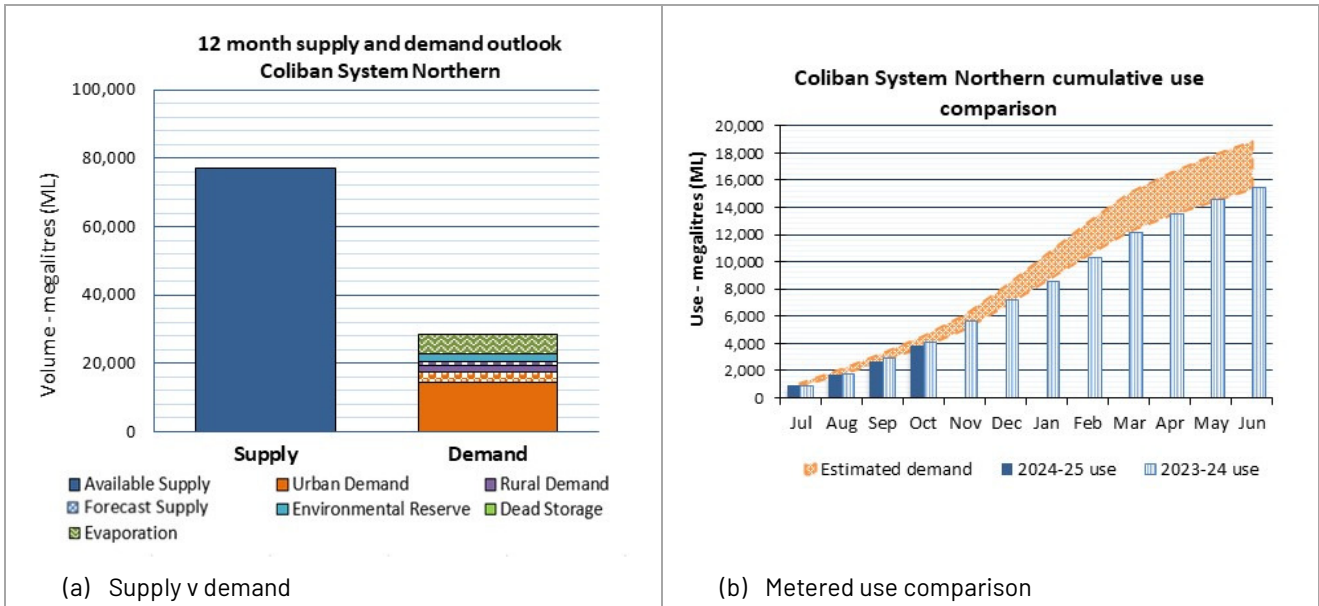
Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
77,128 ML	0 ML	26,213 ML	>12 months	Permanent water saving rules apply

Forecast supply is the available water plus anticipated further inflows and allocations. Refer to Appendix A for detailed information on entitlements and allocations.

The average annual total demand includes system losses (i.e., evaporation and delivery), passing flows, rural and urban use. We aim to maintain 12 months’ supply in the Coliban North System before restrictions may be triggered.

Our rural customers have access to 100% of their licence volume in 2024/25.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

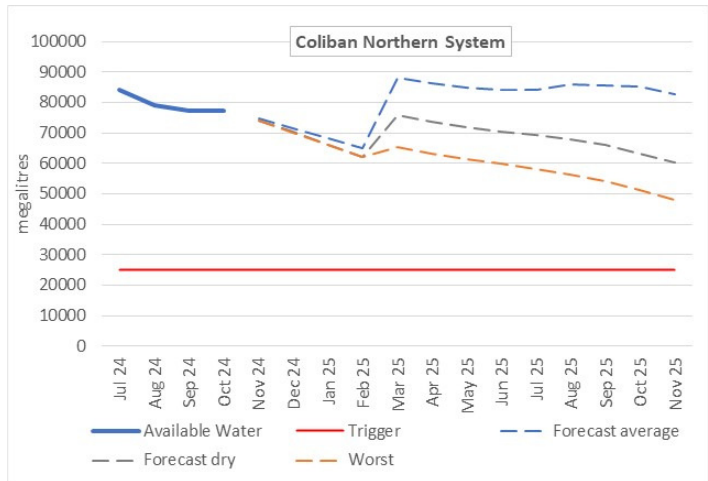


Water outlook

Our current water resource position is very good with allocations of 100% of entitlement and our share of Lake Eppalock near capacity.

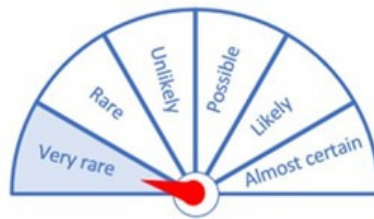
The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 12 months' supply over the coming year.



Likelihood of Restrictions

The probability of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

Action	Timing	Status	Comments
Investigate options to address future water demand / supply imbalance	2026	On track	Secured funding to develop a business case for managed aquifer recharge through the Coliban Integrated Water Management Forum
	2024	Complete	Purchased high reliability water shares in the regulated Goulburn System
Investigate further modernisation of the rural channel network to reduce water losses	Ongoing	On track	Repaired channel leaks
	2025	On track	Rural Water Efficiency project to develop a detailed business case for water saving options being prepared
Increase Class A recycled water production to 1.5 GL/yr in Bendigo	Phase 1 to start in 2024	On track	Planning undertaken as part of upgrades to the Bendigo Water Reclamation Plant. In 2023/24 we produced 1.1 GL of Class A recycled water.
Fit digital loggers to customers meters to assist in determining leaks in customers' homes	2024	On track	Digital metering program to install data loggers to existing customer meters

In addition, we are developing a Recycled Water Strategy to better realise the value of recycled water to water security.

4.4 Coliban South Water Supply System

Towns supplied:	Castlemaine, Elphinstone, Harcourt, Kyneton, Maldon, Malmsbury, Newstead, Taradale and Tylden
Water connections:	12,415
Approx. Population:	21,000
Rural customers:	668
Rural licence volume:	10,280 ML
Water Sources:	Coliban Headwork Storages



Water is sourced from Lauriston Reservoir for the Kyneton potable network; and from Malmsbury Reservoir via the Coliban Main Channel for the Castlemaine potable network. We may also supply the Coliban Northern System from the Coliban Headwork Storages when there is sufficient supply (i.e., greater than 50 GL).

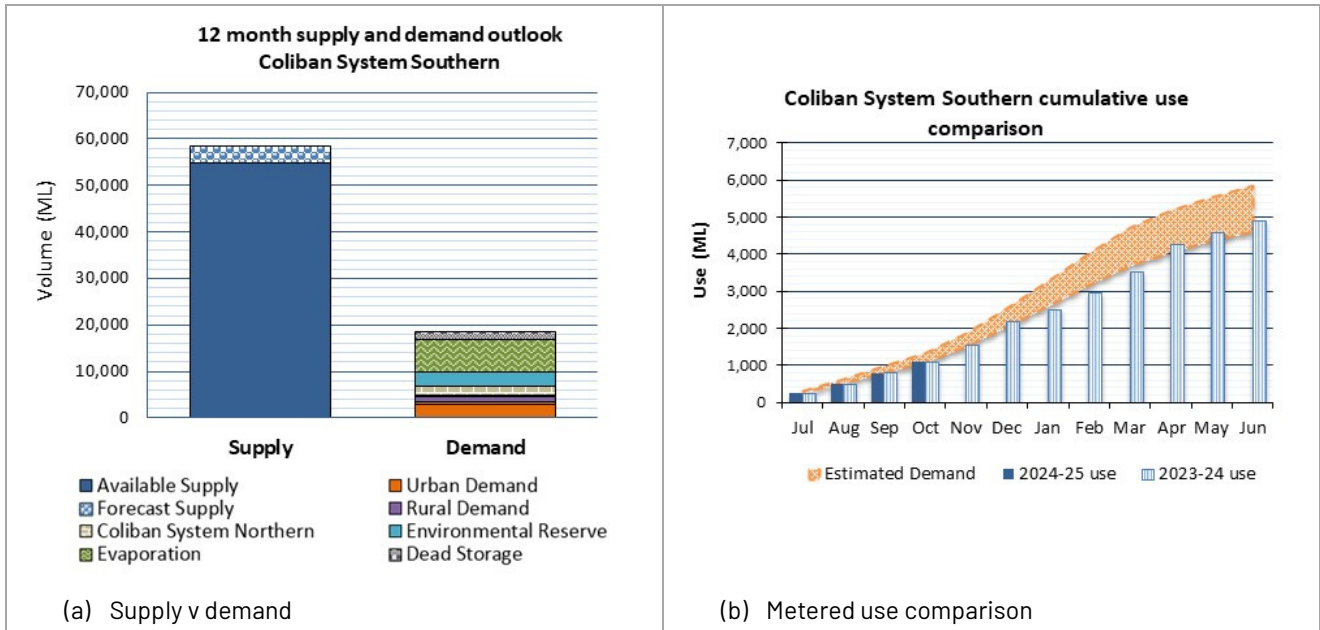
Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
54,758 ML	57,161 ML	15,292 ML	>24 months	Permanent water saving rules apply

Forecast supply is the available water plus anticipated further inflows. The average annual total demand includes system losses (i.e., evaporation and delivery), passing flows, rural and urban use. We aim to maintain 24 months' supply in the Coliban Southern System (30,584 ML) before restrictions may be triggered.

Our rural customers have access to 100% of their licence volume in 2023/24.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

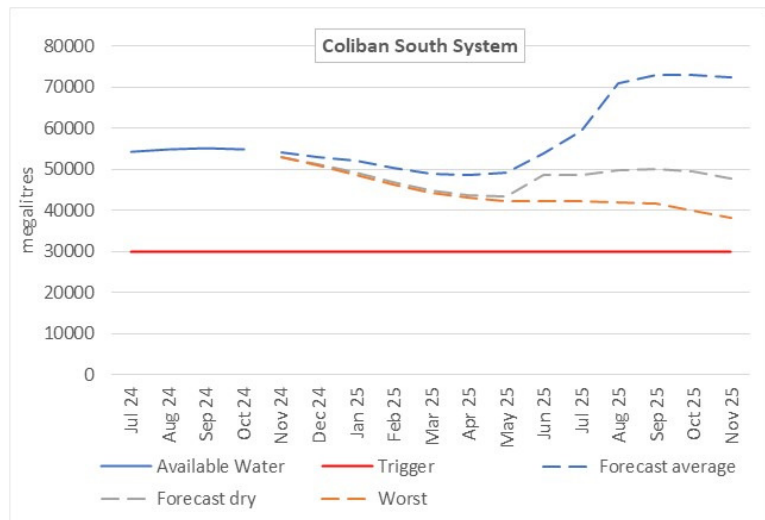


Water outlook

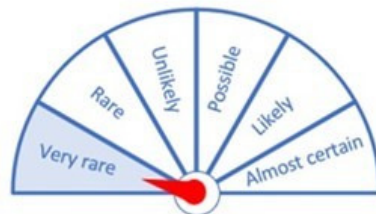
Our current water resource position is satisfactory with the Coliban Headwork Storages at 78% of capacity.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 24 months' supply over the coming year.



The probability of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

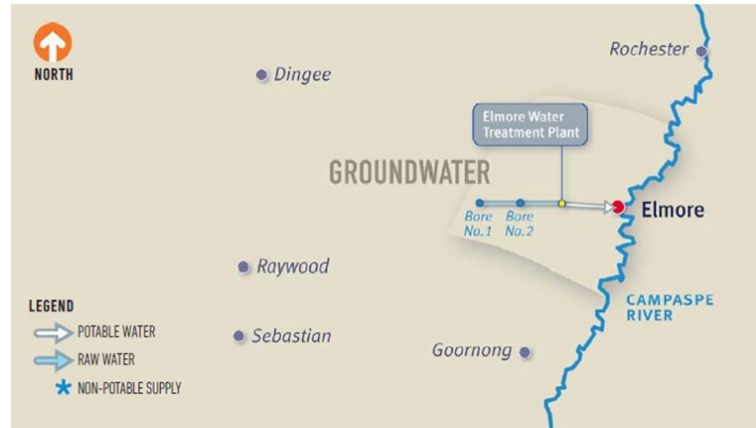
Action	Timing	Status	Comments
Investigate potential for groundwater as an alternative supply for Kyneton	2025	On track	Kyneton groundwater project has identified sites at Carlsruhe and Tylden for further investigation. We have applied for a groundwater license at Tylden and undertaken testing to support our application. We have applied to drill and construct an urban supply bore at Carlsruhe.
Investigate other options to address a demand/supply imbalance over the short term such as supply of water to Castlemaine from Lake Eppalock and the Waranga Western Channel via the Goldfields Superpipe.	2027	On track	We have undertaken works to identify options for a second source of supply to Castlemaine. These options are being assessed to inform a business case.
Investigate further modernisation of the rural channel network to reduce water losses	2025	On track	Rural Water Efficiency project to develop a detailed business case for water saving options
Continue to implement Healthy Coliban Catchment Project	2038	On track	We continue to work with the North Central Catchment Management Authority and Traditional Owners the Dja Dja Wurrung to implement Healthy Coliban Catchment Project. Over the past five years, the project has managed or funded: <ul style="list-style-type: none"> • 37 kilometres of fencing • 296 hectares of weed control • 76 hectares of revegetation • 78 off-stream watering systems



Drilling groundwater bores at Carlsruhe and Tylden

4.5 Elmore Water Supply System

Towns supplied:	Elmore
Water connections:	474
Approx. Population:	847
Water Sources:	Groundwater



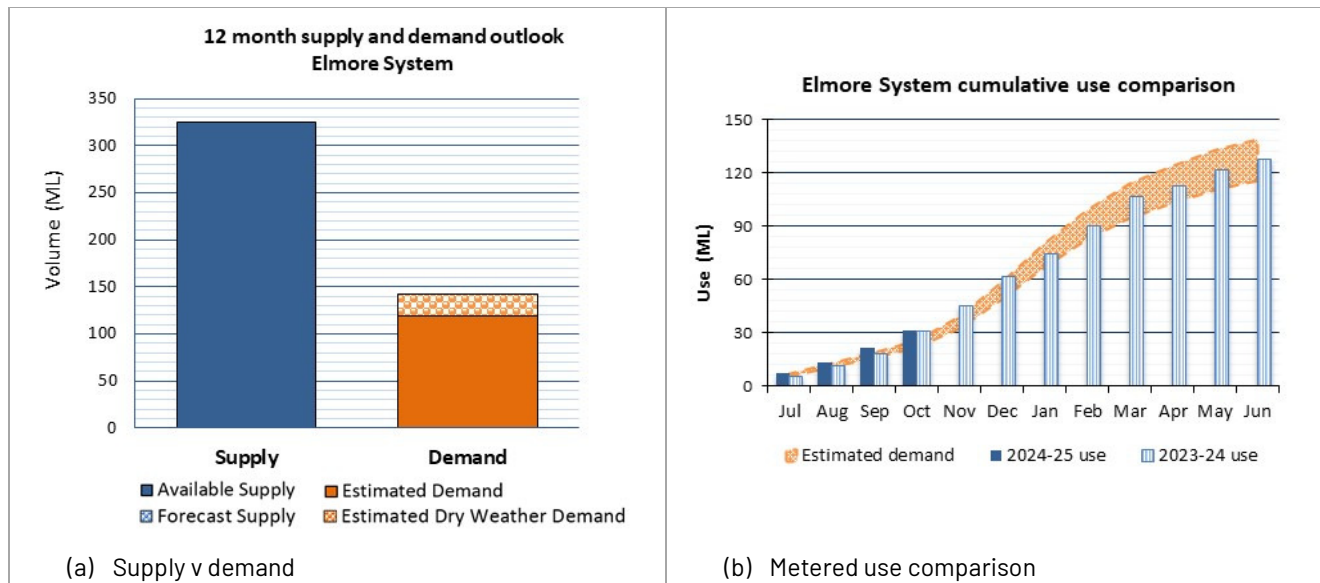
Groundwater is sourced from two bores. Groundwater resources are managed by Goulburn–Murray Water under the [Lower Campaspe Valley Water Supply Protection Area Groundwater Management Plan](#).

Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
325 ML	325 ML	118	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations. Forecast supply is the available water plus anticipated further allocations. We aim to maintain 12 months' supply in the Elmore System before restrictions may be triggered.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

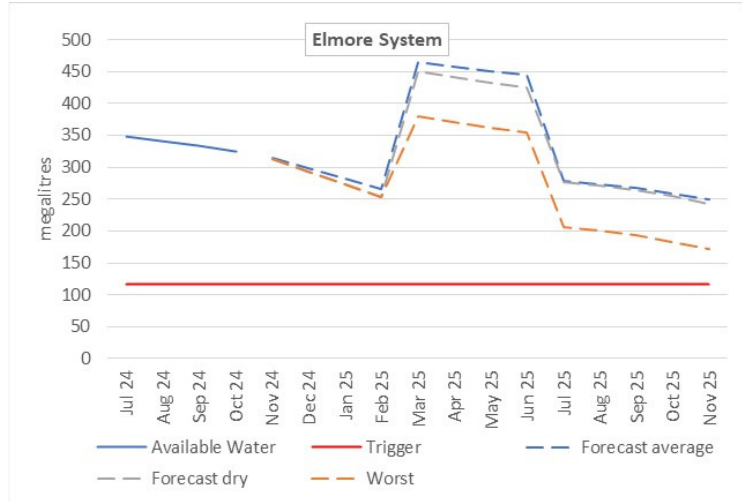


Water outlook

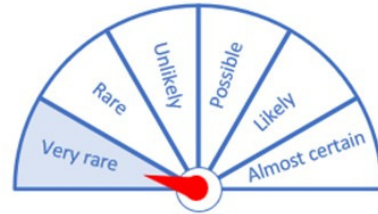
Our current water resource position is very good with allocations of 100% of entitlement.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 12 months' supply over the coming year.



The probability of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Likelihood of Restrictions

Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

Action	Timing	Status	Comments
Further investigate options available to contribute to water security	2024	Complete	Elmore water tower rectification works include increasing water storage capacity

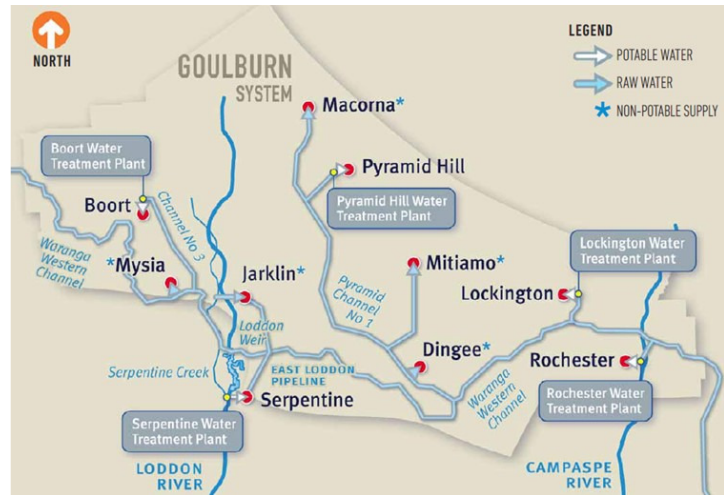
4.6 Goulburn Water Supply System

Towns supplied: Boort, Dingee, Jarklin, Lockington, Pyramid Hill, Macorna, Mitiamo, Mysia, Rochester, Serpentine

Water connections: 2,789

Approx. Population: 6,000

Water Sources: Waranga Western Channel



Rochester may also be supplied from the Campaspe River. Mitiamo is supplied via the Mitiamo Pipeline. Serpentine and Jarklin have a water allowance from the East Loddon Pipeline and may also be supplied from the Loddon River.

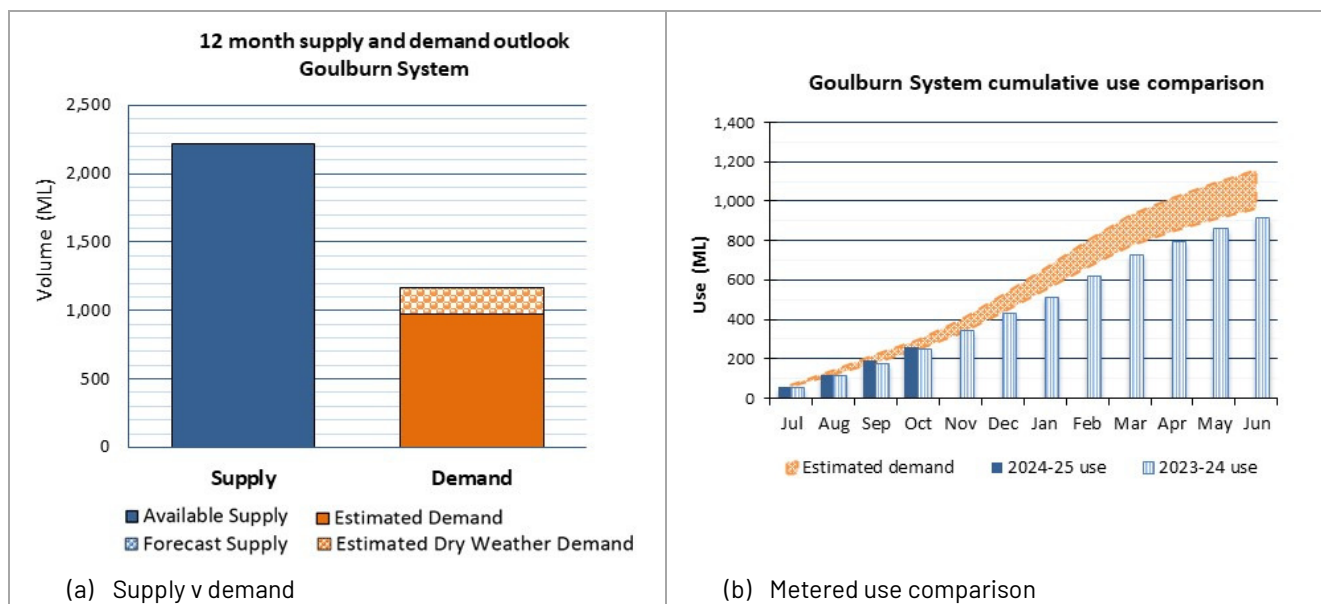
We have a very high reliability of supply under the bulk entitlement for the Goulburn Channel System and receive 100% allocation in most years. The Water Allowance from the East Loddon Pipeline is subject to allocations for the regulated Goulburn System as announced by the Northern Victorian Resource Manager.

Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
2,220 ML	2,220 ML	1,189	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations. Forecast supply is the available water plus anticipated further allocations. We aim to maintain 12 months' supply in the Goulburn System before restrictions may be triggered.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

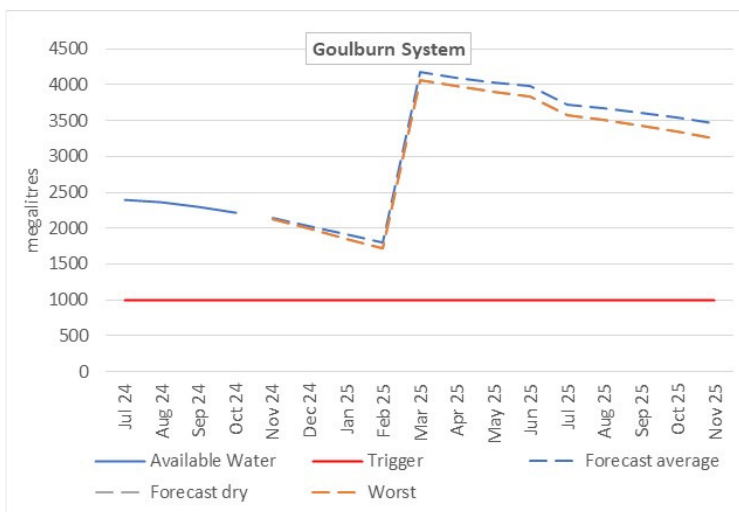


Water outlook

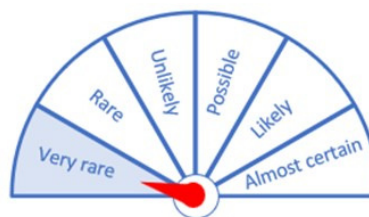
Our current water resource position is very good with allocations of 100% of entitlement.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 12 months' supply over the coming year.



The probability of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Likelihood of Restrictions

Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

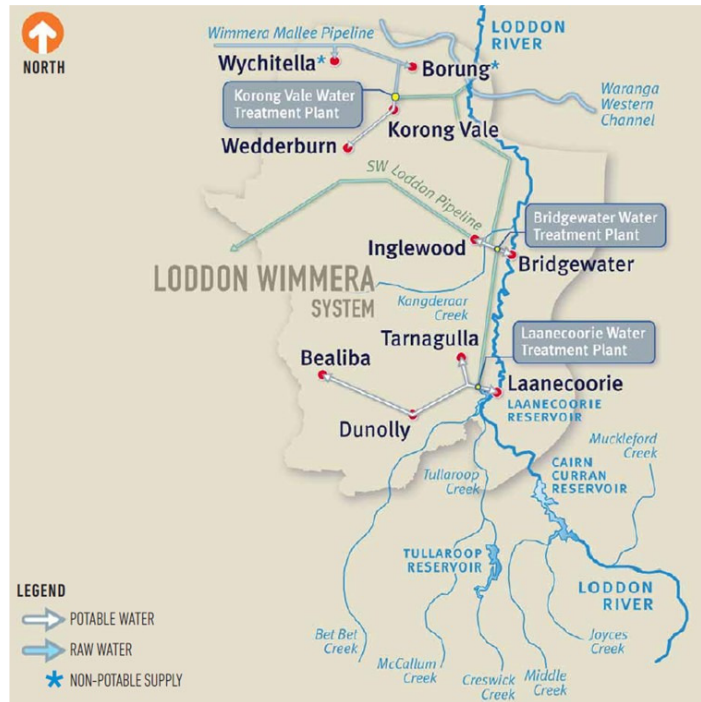
Action	Timing	Status	Comments
We will install tanks at the Mitiamo basin to store water obtained directly from the Mitiamo pipeline.	2024	Complete	Installed 10 x 50 kiloliter tanks at Mitiamo to store water.



New water tanks installed at Mitiamo to receive water from the Mitiamo Pipeline.

4.7 Loddon Wimmera Water Supply System

Towns supplied:	Bealiba, Borung Bridgewater, Dunolly, Inglewood, Korong Vale, Laanecoorie Tarnagulla, Wedderburn, Wychitella
Water connections:	2,082
Approx. Population:	3,700
Water Sources:	Wimmera-Mallee Pipeline Southwest Loddon Pipeline Loddon River



Water for Borung and Wychitella is sourced from the Wimmera-Mallee Pipeline. Bridgewater, Korong Vale and now Laanecoorie are supplied from the Southwest Loddon Pipeline, which sources water from either the Wimmera-Mallee Pipeline or the Waranga Western Channel. Bridgewater and Laanecoorie may also be supplied from the Loddon River.

We receive a minimum 50% allocation under our Loddon Bulk Entitlement and can only hold a maximum of 100% allocation inclusive of carryover. We transfer allocation from the Loddon System to Grampians Wimmera-Mallee Water under a Supply by Agreement to credit our allowance from the Southwest Loddon Pipeline.

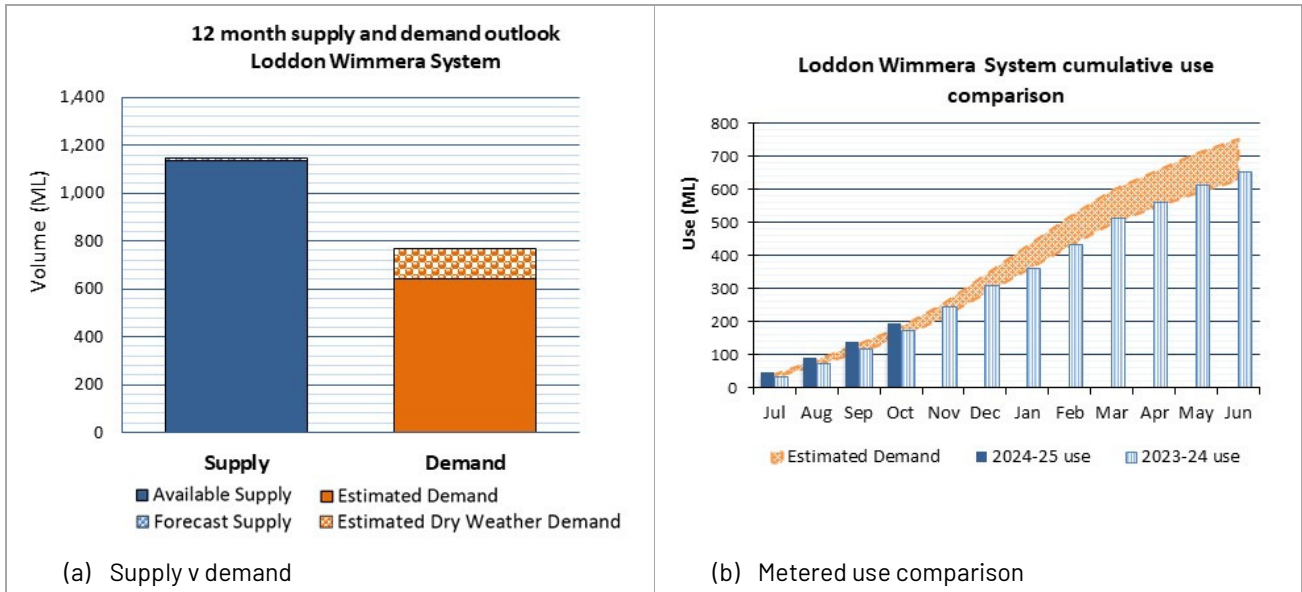
Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
1,136 ML	1,148 ML	628	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations.

Forecast supply is the available water plus anticipated further allocations. We aim to maintain 12 months' supply in the Loddon Wimmera System before restrictions may be triggered.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

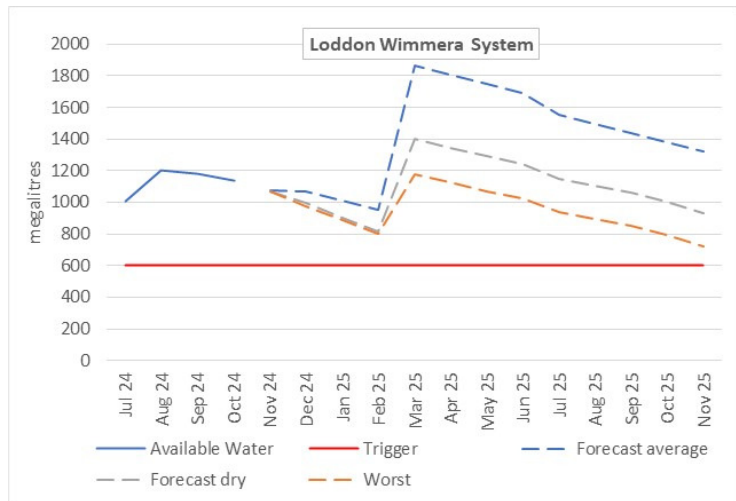


Water outlook

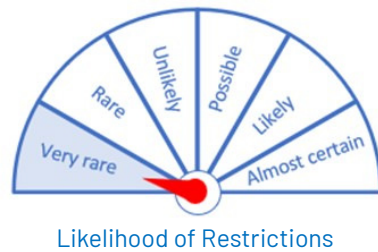
Our current water resource position is good with 100% allocation from the Loddon System and 15% allocation plus carryover of 370 ML from the Wimmera Mallee Pipeline

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under worst conditions, we will have greater than 12 months' supply over the coming year.



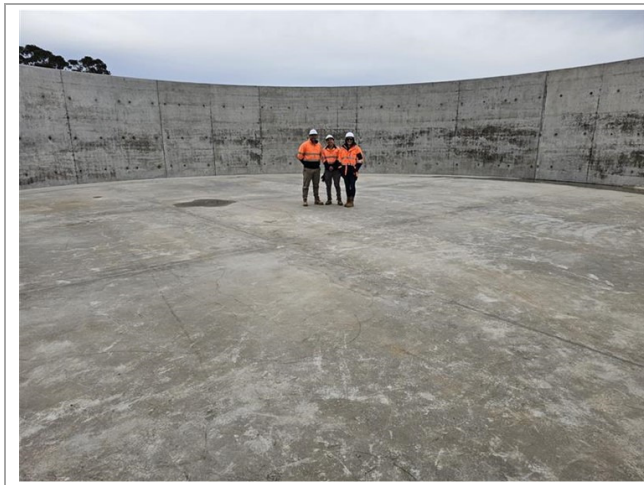
The probability of restrictions is assessed as very rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

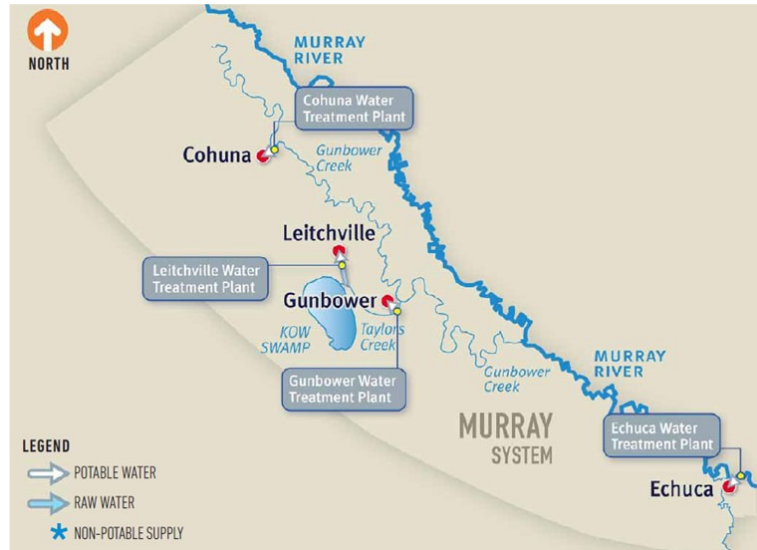
Action	Timing	Status	Comments
Construct a raw water storage at Laanecoorie and connect to the Southwest Loddon Pipeline	2024	Complete	We built two new 1 ML concrete tanks standing 4.5 m high and 20 m in diameter, and a pump station housing two raw water pumps.
Investigate demand initiatives such as water efficient measures and leak detection to reduce high amount water lost within the system	Ongoing	On track	We continued with programs to reduce demand including digital metering, leak identification and repair and promoting programs such as Target Your Water Use initiative, which is a Victorian Government water efficiency program for regional Victorian householders.
Further investigate the options available to contribute to water supply security for the Loddon Wimmera System.	2025	On track	We are developing a Source hydrological model for the Coliban Water region to better inform water resource management decisions to optimise our water holdings



New tanks that receive and store water from the Southwest Loddon Pipeline at Laanecoorie.

4.8 Murray Water Supply System

Towns supplied:	Cohuna, Echuca, Gunbower, Leitchville
Water connections:	9,586
Approx. Population:	17,000
Water Sources:	Murray River



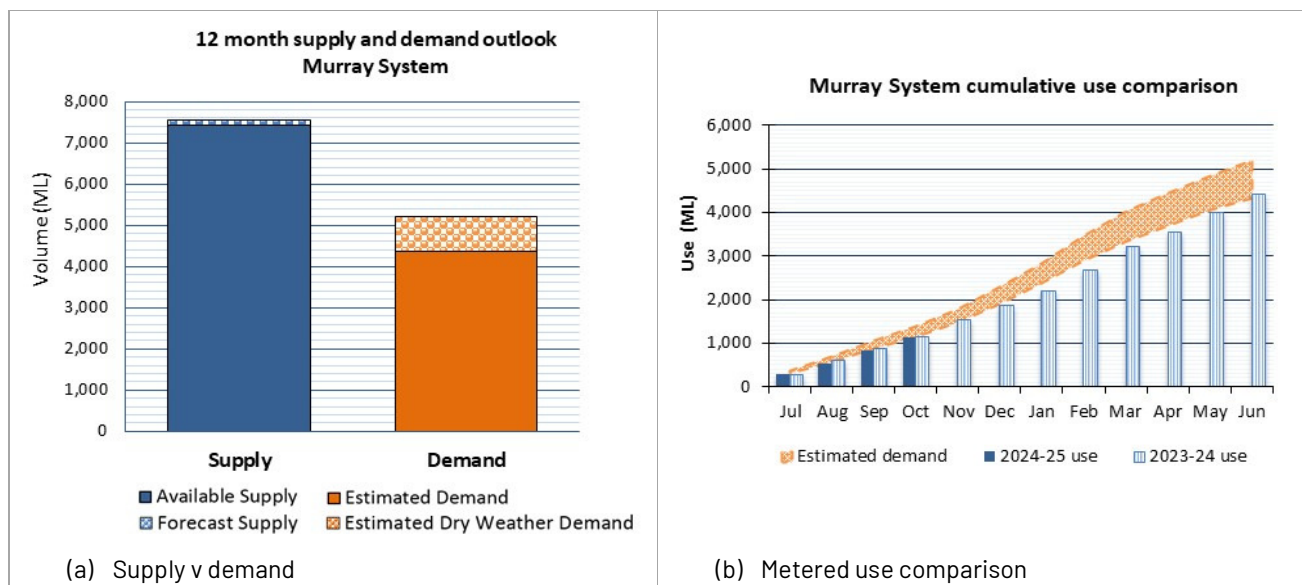
Water is sourced from the Murray River for Echuca; Gunbower Creek for Cohuna; Taylors Creek for Gunbower; and the Cohuna Channel and Gunbower Creek for Leitchville.

Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
7,370 ML	8,181 ML	4,350	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations. Forecast supply is the available water plus anticipated further allocations. We aim to maintain 12 months' supply in the Murray System before restrictions may be triggered.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

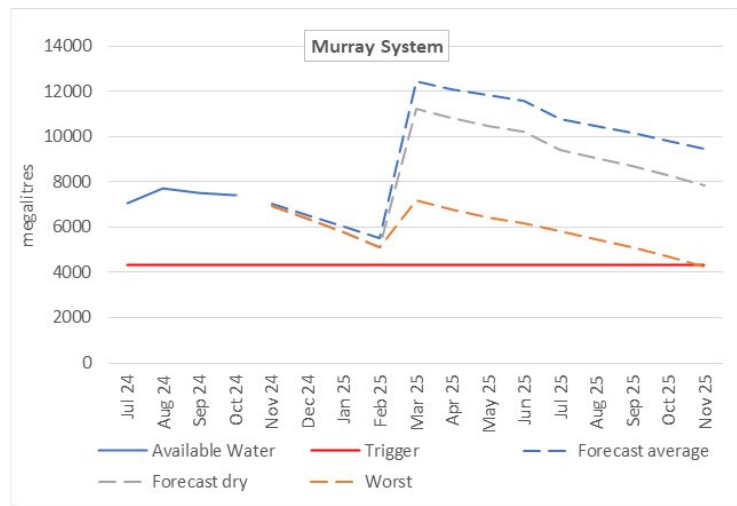


Water outlook

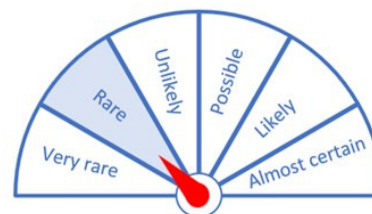
Our current water resource position is good with 100% allocation.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under dry conditions, we will have greater than 12 months' supply over the coming year. While a worst-case scenario suggests that the trigger may be reached next spring, this is unlikely given forecast conditions.



The probability of restrictions is assessed as rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Likelihood of Restrictions

Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

Action	Timing	Status	Comments
Purchase additional water shares	2024	Complete	We have purchased high and low reliability water shares in the Murray System
Investigate the feasibility of supplying recycled water to Echuca West in partnership with Campaspe Shire Council	2023	Complete	We worked with the Campaspe Shire through the Coliban Integrated Water Management Forum to assess the feasibility of supplying recycled water to Echuca West
Investigate options available to contribute to water supply security	2025	Ongoing	We are undertaking a detailed evaluation of options to improve future water security in the Murray System. This includes the potential for a pipeline from the Goulburn System

4.9 Trentham Water Supply System

Towns supplied:	Trentham
Water connections:	753
Approx. Population:	1,180
Water Sources:	Spring fed reservoir Groundwater bore



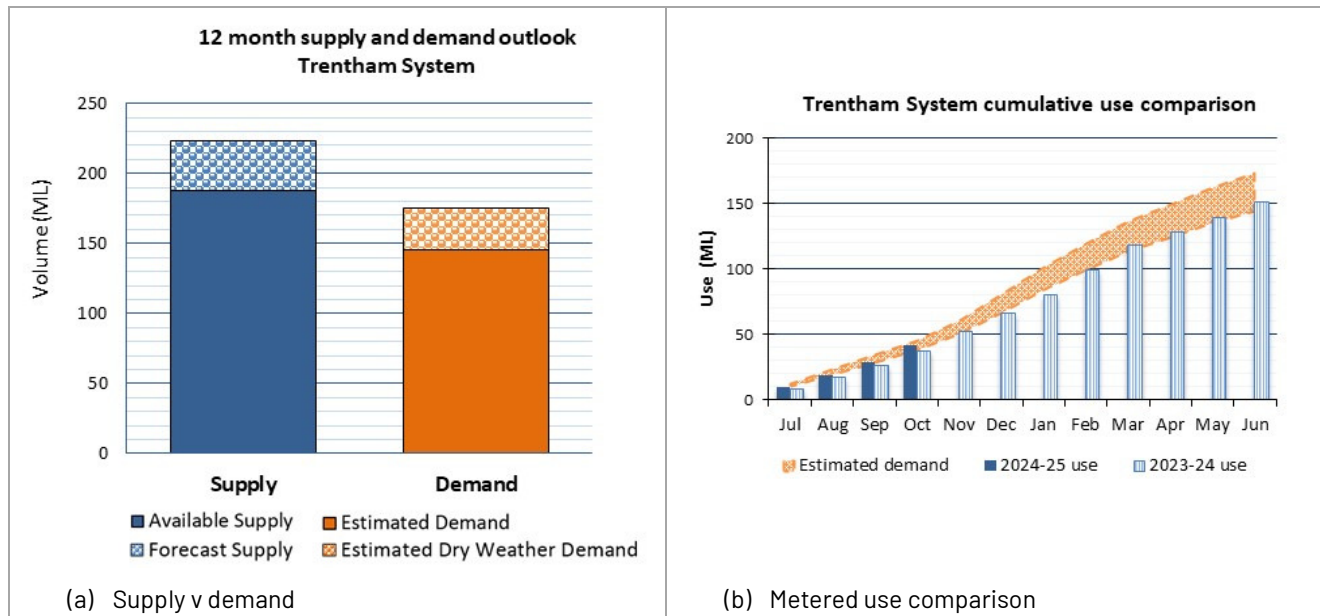
Water is sourced from two spring fed reservoirs which have a combined capacity of 91 ML. We can take an average of 120 ML per year from the reservoirs over a three-year period. Supply is supplemented by pumping from groundwater bores to the reservoirs. Groundwater resources are managed by Goulburn-Murray Water under the [Central Victorian Mineral Springs Groundwater Management Area Local Management Plan](#).

Water resource position 1 November 2024

Available water	Forecast supply	Average annual demand	Available supply	Current water restrictions
187 ML	192 ML	145	>12 months	Permanent water saving rules apply

Refer to Appendix A for detailed information on entitlements and allocations. Forecast supply is the available water plus anticipated additional further inflow and allocations.

Each month, we post a [water summary](#) on our website to provide an update on the water resource position.

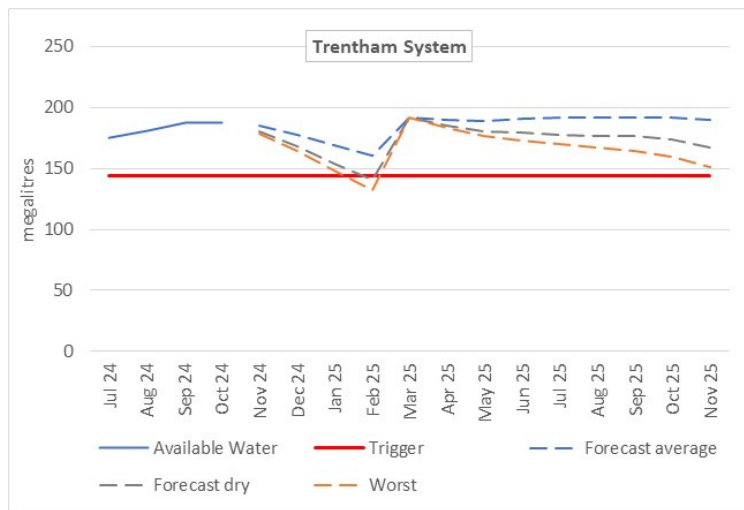


Water outlook

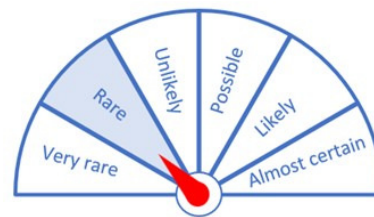
Our current water resource position is good with 100% allocation for groundwater and the reservoirs near full.

The Bureau of Meteorology climate outlook suggests that conditions are going to be warmer, but rainfall will be around average over the coming months i.e., close to average conditions.

Our water supply outlook suggests that, even under dry conditions, we will have greater than 12 months' supply over the coming year. While a worst-case scenario suggests that the trigger may be reached in summer, this is unlikely given forecast conditions.



The probability of restrictions is assessed as rare. It is noted that there are risks such as asset failure or water quality issues that could result in the need to manage demand.



Likelihood of Restrictions

Action Plan

Progress against water resource actions identified in our [Urban Water Strategy 2022](#):

Action	Timing	Status	Comments
Continue to explore for additional groundwater in Trentham	2025	On track	We have installed urban supply bores and applied to Goulburn-Murray Water to amend our existing license to include new bores and increase the license volume by 62 ML/yr. We are currently undertaking monitoring at the request of Goulburn-Murray Water to progress the application.
Investigate connecting Trentham to the Coliban Southern System to provide additional water	2025	On track	We are planning a pipeline route from Kyneton to Trentham

In addition, in 2024 we installed a 1.2 ML treated water storage at the [Trentham water treatment plant](#).



New clear water storage tank at Trentham

Appendix A

Water entitlements				As at 15/11/2024					
Supply		Entitlement		Allocation		Carryover	Spillable	Available	Av. demand
System	Source	Type	ML	%	ML	ML	ML	ML	ML
Campaspe	Campaspe	Bulk Entitlement	349	100%	349	0	0	349	
	sub-total		349		349	0	0	349	74
	Goulburn	HRWS	23,232	100%	23,232	12,251	0	35,483	
	Goulburn	LRWS	2,861	0%	0				
Coliban Northern	Lake Eppalock	Bulk Entitlement	17,440	N/A	N/A	N/A	N/A	51,636	
	Campaspe	HRWS	2,591	100%	2,591	614	0	3,470	
	Campaspe	LRWS	646	41%	265				
	sub-total		46,327		26,088	12,865	0	90,589	26,213
Coliban Southern	Coliban Storages	Bulk Entitlement	32,820	N/A	N/A	N/A	N/A	51,409	
	sub-total		32,820		N/A	N/A	N/A	51,409	15,292
Emore	Groundwater	S51 licence	284	100%	284	71	N/A	355	
	sub-total		284		284	71	N/A	355	118
Goulburn	Goulburn	Bulk Entitlement	2,420	100%	2,420	536	0	2,956	
	Goulburn	Water Allocation	60	100%	60	N/A	N/A	60	
	sub-total		2,480		2,480	536	0	3,016	1,189
Loddon Wimmera	Loddon	Bulk Entitlement	820	100%	816	4	0	820	
	Wimmera	Bulk Entitlement	300	15%	45	366	0	411	
	Rural Pipeline	Water Allocation	110	100%	110	N/A	N/A	110	
	sub-total		1,230		971	370	0	1,341	628
Murray	Murray	Bulk Entitlement	6,285	100%	6,285	1,444	0	7,729	
	Murray	HRWS	1,089	100%	1,089	1,225	0	2,314	
	Murray	LRWS	1,340	0%	0				
	sub-total		7,062		7,374	2,669	0	10,043	4,350
Trentham	Spring	Bulk Entitlement	120	N/A	120	N/A	N/A	89	
	Groundwater	Licence	103	100%	103	N/A	N/A	103	
	sub-total		223		223	N/A	N/A	192	145
TOTAL			90,775		37,769	16,511	0	157,294	48,009