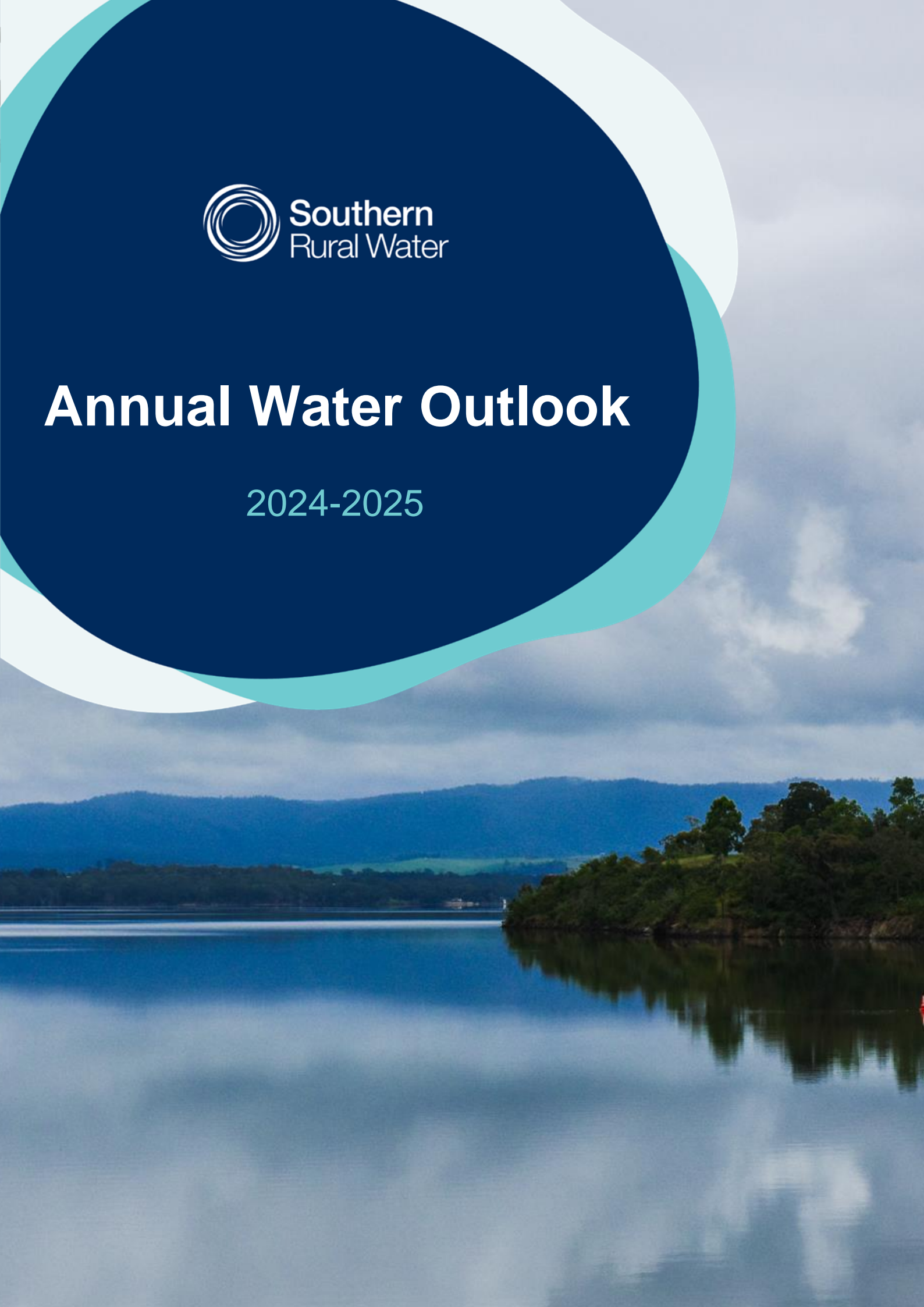




# Annual Water Outlook

2024-2025



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# Executive Summary

Dry conditions experienced in the past year may be alleviated if a La Niña develops in the coming months. The El Niño – Southern Oscillation (ENSO) is currently at La Niña Watch, indicating an increase in rainfall and storms over the summer of 2024-2025. Despite the probability of increased rainfall, temperatures are set to be hotter than average with the probability of exceeding median temperatures greater than 80% in most parts of Victoria.

The Macalister Irrigation District opened with a 60% allocation of high reliability water shares in July. Recent and consistent rain events led to a 100% allocation. The spill period will be reviewed in mid-December, at which point an outlook will be issued on low reliability water shares.

The Werribee and Bacchus Marsh Irrigation Districts opened with an allocation of 50% of high reliability water shares with customers holding approximately 9GL of carryover. At the opening of the irrigation season, Pykes Creek Reservoir was holding 86% capacity and Melton Reservoir held 54% capacity. Recent rainfall in the catchment has resulted in the allocation reaching 95% high reliability shares as of October 2024.

Drier conditions in unregulated surface water systems have meant that some restrictions may be implemented earlier in the season, including the eastern and southern areas of Gippsland. Central region catchments are recording average rainfall and stream flows. Reduced flows in the major streams in the western region were also experienced and as a result SRW are implementing several measures to assist communities in this region.

Groundwater level trends are stable or rising in the Gippsland, Port Phillip and Western Port regions. Some declining trends have been recorded in the southwest region reflecting the drier conditions observed in the last year.

# Introduction

Southern Rural Water (SRW) has responsibility for managing surface water licensing, groundwater extraction, storage dams and irrigation districts across the southern third of Victoria. We supply water for agricultural, urban, power generation and industrial purposes.

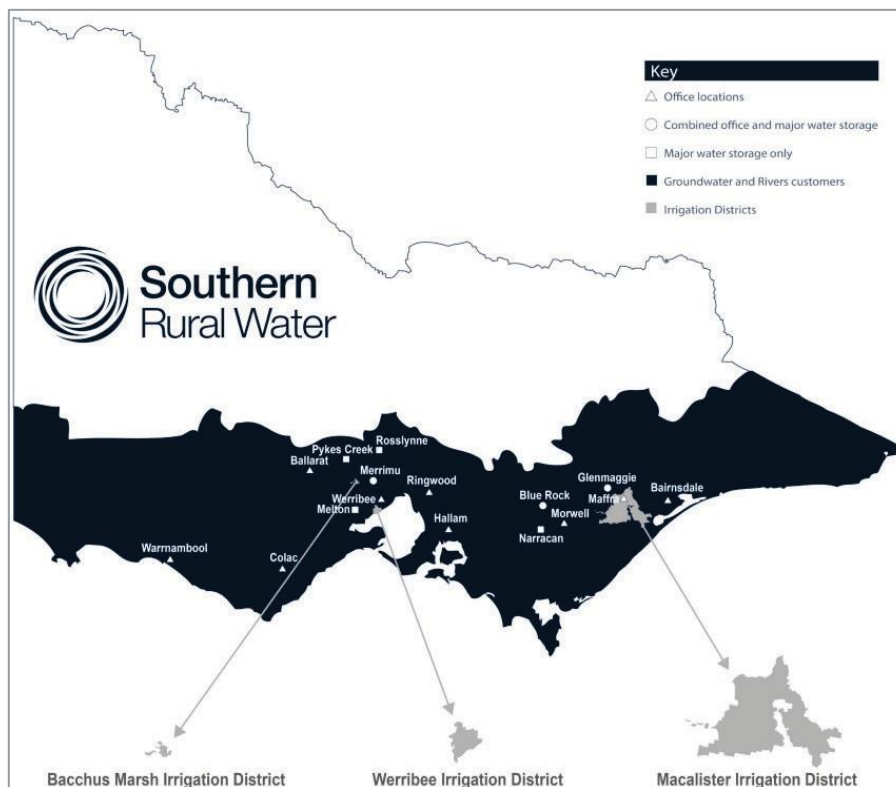


Figure 1: Southern Rural Water Service Area

Across this geographic area SRW manages:

- seven major dams
- three irrigation districts
- licences for taking water from rivers and groundwater aquifers
- licences for operating farm dams.

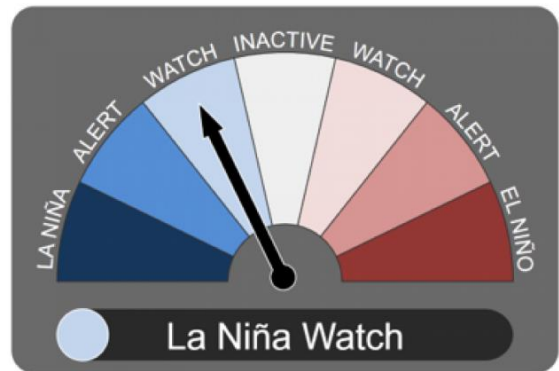
As detailed in Figure 1, SRW manages the Macalister Irrigation District (MID) in central Gippsland and the Werribee (WID) and Bacchus Marsh (BMID) irrigation districts west of Melbourne. Much of the water used in the irrigation districts is for primary agricultural production, along with stock and domestic and minor industrial use. Water shares are held by individual customers within the districts and transactions are recorded in the Victorian Water Register.

Blue Rock Lake (part of the Latrobe River system) plays a key role in providing cooling water for Victoria's brown coal power generation. Blue Rock Lake and Lake Glenmaggie also have environmental water entitlements that are managed by the West Gippsland Catchment Management Authority on behalf of the Victorian Environmental Water Holder. Visit SRW's website for further information: [www.srw.com.au](http://www.srw.com.au).

# Climate Outlook

## Climate Influences

The latest monitoring update issued in September 2024 from the Bureau of Meteorology (BOM) indicates the El Niño – Southern Oscillation (ENSO) is at La Niña Watch. BOM’s model indicates sea surface temperatures (SSTs) and atmospheric patterns in the central equatorial Pacific Ocean are at ENSO neutral levels, but that three of 7 climate models suggest the possibility of SSTs in the tropical Pacific exceeding the La Niña threshold from October. This means it is possible a La Niña may develop in coming months.



Global SSTs were the warmest on record for each month between April 2023 and June 2024, with global SSTs for July 2024 the second warmest on record. Warm oceans can provide increased moisture and energy that can increase rainfall and severity of storms.

Rainfall deficiencies remain in western and southern parts of Victoria. The long-range forecast for November 2024 to January 2025 shows that rainfall has 45 to 60% chance of exceeding median rainfall across the southern part of Victoria. The southwest of the state is less likely to exceed median rainfall than central and east Gippsland regions.

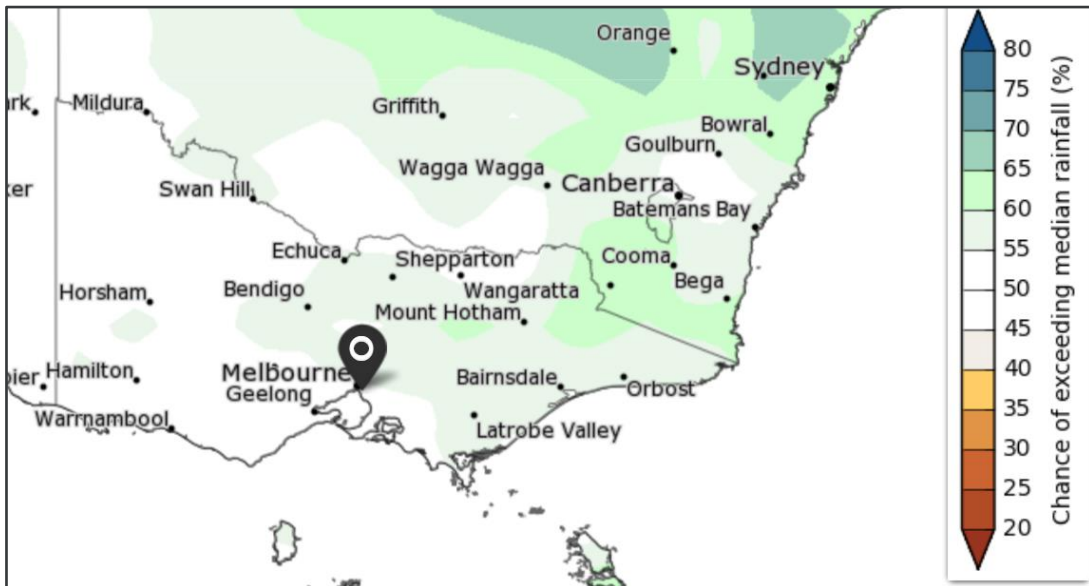


Figure 2 Chance of exceeding the median rainfall November 2024 to January 2025 (Source: BOM)

Temperature and rainfall influence water use, especially during summer periods. At the same time, they also influence catchment soil moisture levels and inflows to SRW’s unregulated waterways and storages. SRW continually monitors flow conditions and the BOM’s seasonal climate outlooks. Waterway flow and rainfall information is made publicly available on the SRW website. For the most up to date weather, temperature and rainfall data and predictions, see the BOM website [www.bom.gov.au/climate/](http://www.bom.gov.au/climate/).

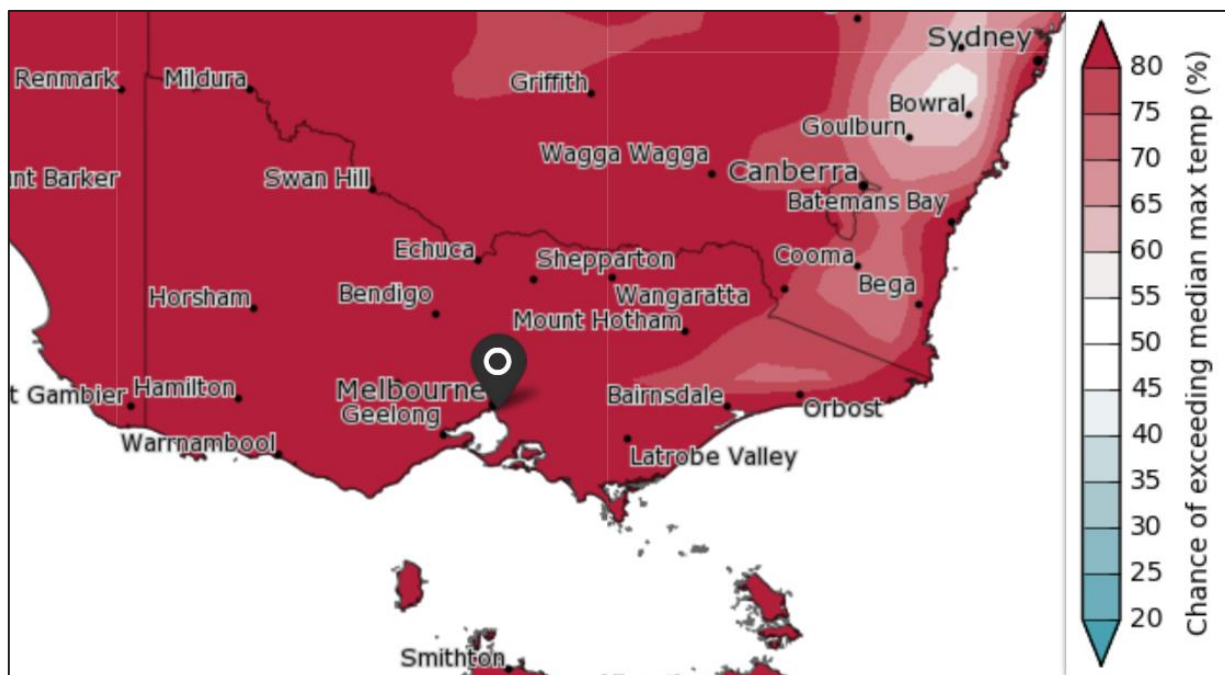


Figure 3 Chance of exceeding the median maximum temperature for November 2024 to January 2025 (Source: BOM)

The months ahead are highly likely to be hotter than average. Figure 3 indicates that across SRW's area, the probability of exceeding median temperatures from November 2024 to January 2025 is greater than 80% in most areas. The timing of warmer weather and rainfall are critical to growing and harvesting crops.

## Longer term trend

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

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.

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>

SRW continues to improve our preparation for drought events, with business continuity plans designed to respond to short and long-term (drought) supply interruption.

Specifically, we can supply additional water which was purchased in 2016 from the Thomson drought reserve, as well as a small share of entitlement from Blue Rock Lake which is held by SRW for downstream licence holders.

# Macalister Irrigation District

## Current water resource position

The Macalister Irrigation District's (MID) primary sources of water are Lake Glenmaggie and Thomson Reservoir. Lake Glenmaggie is an annual fill and spill reservoir, which means SRW is reliant on winter and spring rains to fill it to enable a 100% seasonal determination for the MID. Thomson Reservoir holds the drought reserve which provides additional allocation in years with low rainfall.

Lower inflows through early winter resulted in an opening seasonal allocation announcement of 60% of High Reliability Water Shares (HRWS) on 1st July. For irrigators on the channel system, the irrigation season started on 15th August, while those taking directly from the river can operate all year round.

Recent and consistent rain events led to 100% HRWS allocation for customers in the MIA. This may result in "spill allocations" in the coming weeks until 15th December with 29,000 ML delivered in the season so far. Spill allocations essentially 'reset' a customer's available allocation to 100% HRWS, providing an opportunity to reassess their irrigation requirements for the remaining season.

Irrigation deliveries have been operating close to capacity leading to supply delays. Expected warm weather and limited rainfall are likely to ensure this continues.

There will be no further allocation announcements until after 15th December at the end of the spill period. At that time, we will assess storage levels, inflows, customer usage and Thomson Reserve volume to provide an outlook on when allocation of low reliability water shares will be issued.

## Forward outlook

Lake Glenmaggie is a fill and spill system therefore opening allocations are highly dependent on rainfall over autumn and winter within the Macalister catchment area. Additionally, the Thomson drought reserve volume is used to supplement opening allocations.

The BOM's climate outlook suggests this year will be hotter than average, with heavy storms possible. Utilisation of water resources from storages is likely to be high into the coming months. High allocation and demand could lead to order delays in some areas like those experienced in the past two seasons.

Consistent with our price submissions, SRW will auction 1,000 ML of HRWS in the current year. Seasonal allocation will also be available.

# Werribee and Bacchus Marsh Irrigation Districts

## Current water resource position

The Werribee and Bacchus Marsh Irrigation Districts primary storages are the Pykes Creek Reservoir and the Melton Reservoir. At the opening of the irrigation season, Pykes Creek Reservoir was holding 86% of capacity while Melton Reservoir held 54% of capacity.

Irrigation supply to the Werribee Irrigation district (WID) has been augmented with a supply of Class A recycled water since 2005, to assist with overcoming water shortages due to drought and to secure water for greater production in the future.

The opening allocation for the season was set at 50% of high reliability water shares, with customers holding approximately 9 GL of carryover. Since the opening allocation, our catchments to these reservoirs have received some rainfall resulting in the storages sitting at similar positions to the start of the irrigation season. Allocation has reached 95% high reliability shares as of 22 October 2024.

Water deliveries since the start of the season were tracking slightly above the 5-year average for this point in the season for both the WID and BMID.

## Forward outlook

The BOM outlook suggests above average temperatures and average rainfall through to January for the Werribee System. The availability of allocation against the remaining high and low reliability water shares will be assessed fortnightly against seasonal conditions and stream flows, with the expectation of further allocation announcements for the remainder of the season.

# Latrobe System

## Current water resource position

Blue Rock Reservoir is the primary storage for the Latrobe System. Water from Blue Rock Reservoir is primarily used for electricity generation in the Latrobe Valley coal fire power plants. It also supplies Gippsland Water with water for urban supply to towns in the Latrobe Valley and secures entitlements for licensed river diverters along the Latrobe River.

The reservoir is 99% full as of 21st October 2024 and so restrictions are not expected over the summer months.

## Forward outlook

With the current high-water levels in the Latrobe River storages and the wet seasonal outlook, restrictions to water supply are not expected.



# Maribyrnong system

## Current water resource position

The Rossllynne Reservoir on Jackson's Creek near Gisborne provides water to the townships of Sunbury and Gisborne, and irrigation water to licence holders along the Maribyrnong River, with a capacity of 25,400 ML.

There has been little inflow to the reservoir over winter, but it is still 84% full, down from 92% at the same time last year.

## Forward outlook

With Rossllynne storage at 84%, restrictions on irrigation or urban supply are not expected. Urban supplies are managed by the relevant urban water authority, with information provided in their outlooks.

# Unregulated surface water

## Overview

Unregulated surface water relates to water accessed from rivers where supply to some or all users is not managed through releases from onstream dams. Most rivers in southern Victoria are therefore unregulated. Access to water in unregulated rivers is governed through rules documented in Local Management Plans. The purpose of these plans is to provide fair and equitable access for consumptive users and the environment. These rules set out a framework for trade, restricting access and managing local water issues. Access to water is therefore linked to streamflow which relates to antecedent and forecast climate conditions such as rainfall.

## Gippsland Region

Conditions across Gippsland have been highly variable in the preceding 12 months. Rainfall has been at or below average for much of Gippsland, with a few exceptions.

In eastern regions, the Avon River has been on stage one and two of the irrigation roster restrictions with the Mitchell River at times being on a winterfill ban. Streams in west and south Gippsland have maintained good flows leading into spring.

Rainfall to September 2024 this year across eastern Gippsland was 400 to 450mm, and 550 to 650mm in western and southern Gippsland. Higher rainfall was isolated to some areas.

The outlook for late spring and early summer broadly indicates that average rainfall is likely, with the chance of some wetter conditions forming.

Stream flows suggest that some restrictions may be implemented earlier in the season for parts of East Gippsland, and mid to late season for parts of West and South Gippsland. The Tarra River (South Gippsland) may be on restrictions in the coming weeks if sufficient rainfall does not arrive.

## Western Region

Rainfall in western Victoria has been below average resulting in reduced flows in the major streams. (Barwon River, Leigh River, Glenelg River, Wannon River, Hopkins River and Mount Emu Creek). Overbank flows have been scarce compared to previous years. SRW has been proactive in assisting customers and communities to identify the locations of Emergency Water Supply Points in the region and informing customers of their options for alternative water supplies.

Rainfall across the region has been average for late winter and spring in Geelong and eastern zones.

The Otway Basin has experienced lower rainfall compared to the last season and the Gellibrand and Curdies rivers are experiencing much reduced flows from this time last year. Restrictions on the Moorabool River will be managed in accordance with the local management plan.

If catchment dam levels are low from the dry season, winter-fill licence-holders may not have been able to use their full allocations and fill off-stream storages. Stock water dams in the far west are well below capacity.

Rosters and restrictions for all river basin systems are likely to be normal with any increase from Stage 1 to be made just prior in December 2024.

Annual groundwater usage in the Southwest Limestone remains low. Most licence-holders should be able to utilise their full 30% carry-over allocations for this season, which will be important with the drier summer forecast.

## Central Region

The Central Region has experienced average rainfall this year, and stream flows have remained consistent with long-term averages. Forecasts predict below-average rainfall for the period November 2024 to January 2025. This is likely to result in drier than normal conditions with restrictions imposed on licensed users. All central region catchments will be monitored closely over summer and any restrictions will be imposed in line with relevant operating rules.

Winter and spring rainfall across the Dandenong Creek catchment has been consistent with long-term averages against wetter conditions observed last year. Average flows have been observed in Mile Creek, Monbulk Creek and Eumemmerring Creek systems.

The Werribee and Maribyrnong catchments had above average rainfall for the first nine months of 2024. The Turitable Creek and Willimigongong Creek are often subject to a total ban or restrictions in the summer months though neither system has had bans imposed in the past two years. With predicted rainfall, these systems may avoid bans again this year, however, these systems can be quick to change and will be monitored closely.

## Groundwater

The groundwater allocation for Deutgam Water Supply Protection Area was announced as 50% on 1<sup>st</sup> July 2024 for the 2024-2025 season. This is the first time that restrictions have been in place since the 2021-2022 season, which reflects the recent change in climate conditions.

Groundwater level trends for groundwater management units (GMUs) have been determined based on 5 years (short term) of consistent monitoring data from key bores in the State Observation Bore Network (SOBN).

Groundwater levels are stable or rising in the Gippsland, Port Phillip and Western Port regions whereas trends are stable or declining in the south-west region reflecting the drier conditions observed in the last year.

Recent groundwater level trends for each groundwater management unit are summarised in Table 1.

Table 1 - Groundwater level trends

Gippsland Region		
Groundwater Management Unit	Recent Trend	Notes
Corinella	Rising	
Denison		Insufficient data
Giffard	Stable	
Leongatha	Rising	
Moe		Insufficient data
Orbost		Insufficient data
Rosedale		Insufficient data
Sale	Rising	
Stratford	Rising	
Tarwin	Stable	
Wa De Lock	Rising	
Wy Yung	Rising	
Yarram	Rising	
South-west region		
Groundwater Management Unit	Recent Trend	Notes
Bungaree	Rising	
Colongulac	Declining	
Condah	Declining	
Gellibrand	Stable	
Gerangamete	Rising	
Glenelg		GMU abolished in August 2022.
Glenormiston		Insufficient data
Jan Juc	Declining	
Newlingrook		Insufficient data
Paaratte	Declining	

Portland		Insufficient data
South-West Limestone	Stable	
Warrion	Rising	
<b>Port Philip &amp; Western Port region</b>		
<b>Groundwater Management Unit</b>	<b>Recent Trend</b>	<b>Notes</b>
Cut Paw Paw		Insufficient data
Deutgam	Stable	50% allocation
Frankston	Rising	
Koo Wee Rup	Rising	
Lancefield	Stable	
Merrimu	Stable	
Moorabbin	Rising	
Nepean	Stable	
Wandin Yallock	Stable	

Source: [https://www.water.vic.gov.au/\\_data/assets/excel\\_doc/0028/716545/groundwater-trends-2018-2024.xlsx](https://www.water.vic.gov.au/_data/assets/excel_doc/0028/716545/groundwater-trends-2018-2024.xlsx)

## Further information

SRW provides a variety of information on allocations, streamflows, rosters, restrictions and delivery/availability issues on our website [www.srw.com.au](http://www.srw.com.au).

Water trading information is also available through SRW and on our website <https://www.srw.com.au/customer/buy-and-sell-water/water-trading>.

For all climate, weather predictions and observations, customers should go to the Bureau of Meteorology site at [www.bom.gov.au](http://www.bom.gov.au).