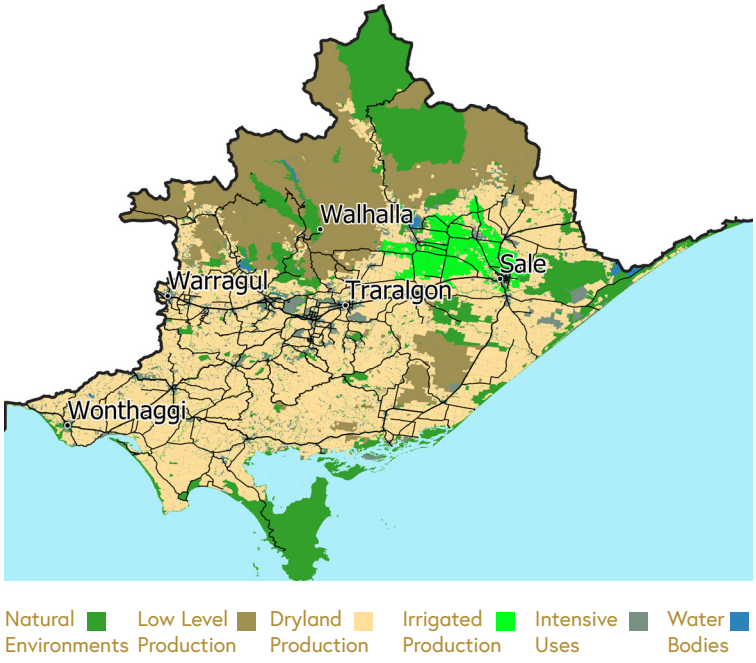
Regional Weather and Climate Guide

In the last 30 years in West Gippsland

- Annual rainfall has been relatively stable
- Rainfall has decreased in the autumn and spring months
- Rainfall is usually reliable year-round
- Dry years have occurred three times as often as wet years
- Spring frosts have become more common inland around Traralgon
- There have been more hot days, along with more consecutive days above 35 °C



West Gippsland at a glance

The West Gippsland region covers 1.72 million hectares, with 41% of land under agricultural production. Dairy, cattle and sheep make up 70% of the region's agricultural output, and it also produces hay, vegetables (including almost all of Victoria's sweet corn), wool, poultry and eggs.
West Gippsland is also a major supplier of timber and paper products with extensive areas of land under forestry. Agricultural production in the region was valued at $1.28 billion in 2017-18.

A guide to weather and climate in West Gippsland

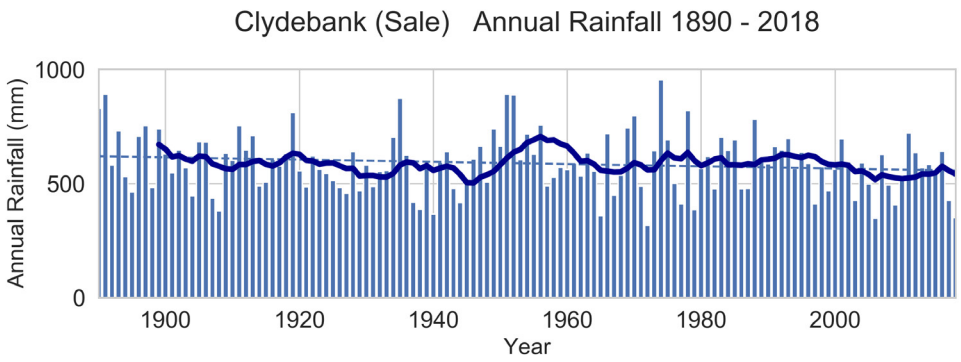
Primary producers make decisions using their knowledge and expectations of regional weather patterns. The purpose of this guide is to provide an insight into the region's climate and an understanding of changes that have occurred through recent periods. This information can potentially assist primary producers and rural communities make better informed decisions for their business and livelihoods. This guide is part of a series of guides produced for every Natural Resource Management area around Australia.

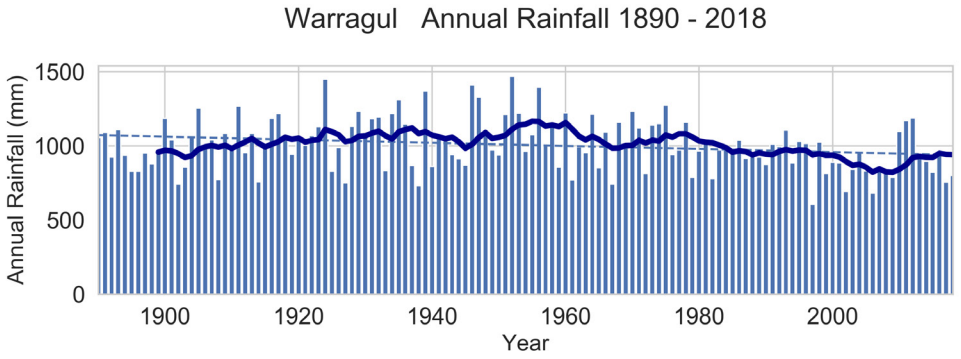
A climate guide for agriculture
West Gippsland, Victoria

Annual Rainfall

Annual rainfall in West Gippsland has been stable

Annual rainfall in West Gippsland has been relatively stable over the past 30 years (1989–2018), decreasing by around 60 mm (-7%) from about 910 mm to 850 mm when compared to the previous 30 years (1959–1988). The charts show annual rainfall (blue bars), with a 10-year running average (solid blue line) for Clydebank (Sale) and Warragul. Although the average annual rainfall has remained unchanged, it still fluctuates from year to year with natural variability. In the past 30 years, dry years (lowest 30%) have occurred 14 times, and wet years (highest 30%) have occurred five times, while the remaining years were in the average range. Note the Millennium drought accounted for nine of the dry years in the recent period. During the previous 30-year period (1959–1988), dry years occurred seven times and wet years occurred 11 times.



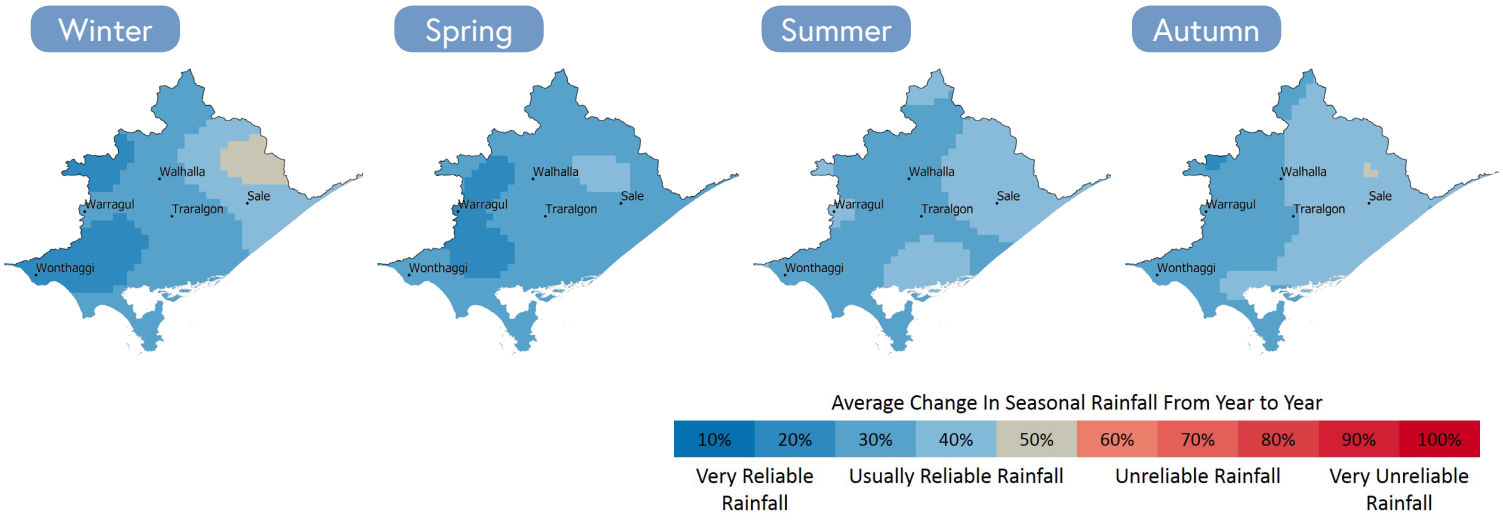


For more information on future projections, visit the Climate Change in Australia website
> www.climatechangeinaustralia.gov.au

Want to know more about the guides? Try Frequently Asked Questions at
> www.bom.gov.au/climate/climate-guides/

Rainfall is usually reliable all year

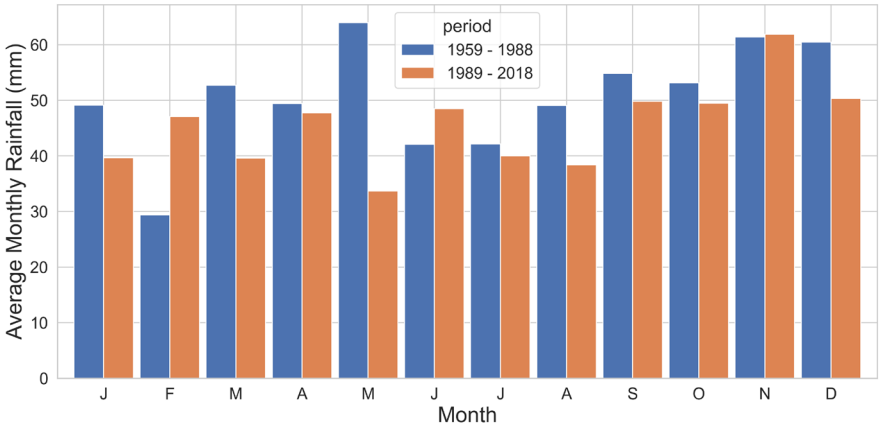
Rainfall reliability maps for the past 30 years (1989–2018) show West Gippsland rainfall is reliable all year round, with usually about 60 mm difference from one year to the next. Areas shaded blue represent lower variability, or more reliable rainfall from year to year, while areas shaded beige show higher variability, and less reliable rainfall.



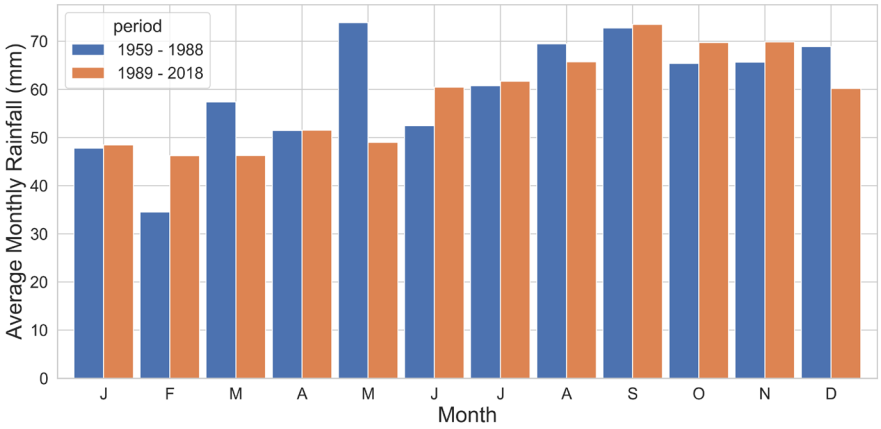
Growing season rainfall has decreased

Rainfall in the autumn and spring months decreased at East Sale and Traralgon between 1989–2018 (orange bars) compared with 1959–1988 (blue bars).
Over the past 30 years, average growing season rainfall (April to October inclusive) for Sale was 307 mm; 47 mm lower than the 354 mm average for the previous 30-year period (1959-1988).
For Traralgon, growing season rainfall has declined 42 mm over the same period.

East Sale Airport 30-year Average Rainfall by Month

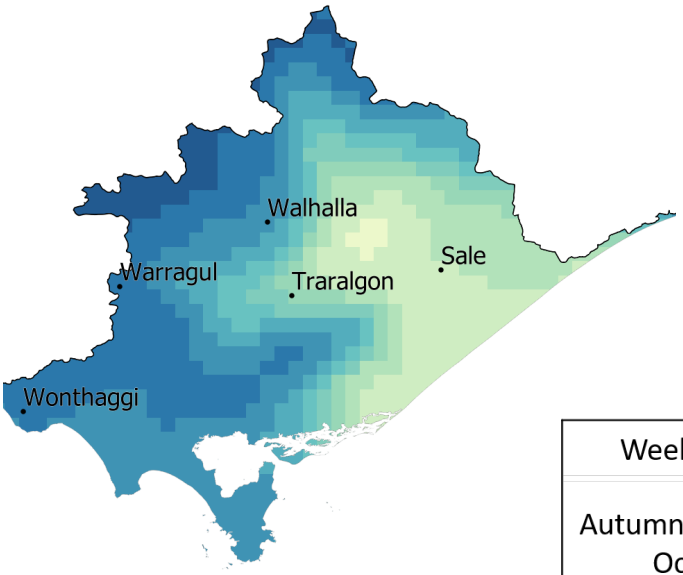


Traralgon 30-year Average Rainfall by Month



For more information on the latest observations and science behind these changes, refer to the State of the Climate Report
> www.bom.gov.au/state-of-the-climate/

Timing of the autumn break in the West Gippsland region



In the West Gippsland region the autumn break can be defined as 25 mm over three days prior to the commencement of sowing. The map shows that over the past 30 years (1989–2018) the break typically occurred in early May around Wonthaggi, Warragul and Walhalla, and not until June around Traralgon, Heyfield and Sale (light green to yellow areas) in the east. In the eastern half of the region in the last 30 years, the autumn break has been occurring about one month later than it did in the period 1959-1988.

Weeks after 1 April	3	4	5	6	7	8	9	10	11	12
Autumn Break Usually Occurred After...	28 April	5 May	12 May	19 May	26 May	2 June	9 June	16 June	23 June	30 June

A climate guide for agriculture **West Gippsland, Victoria**

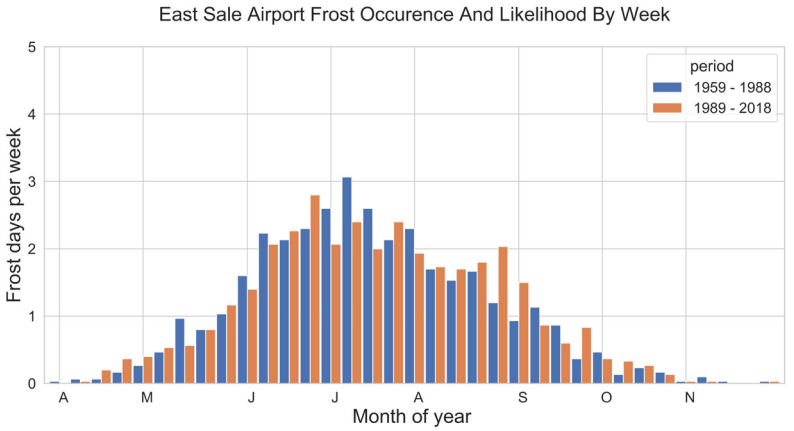
Frost

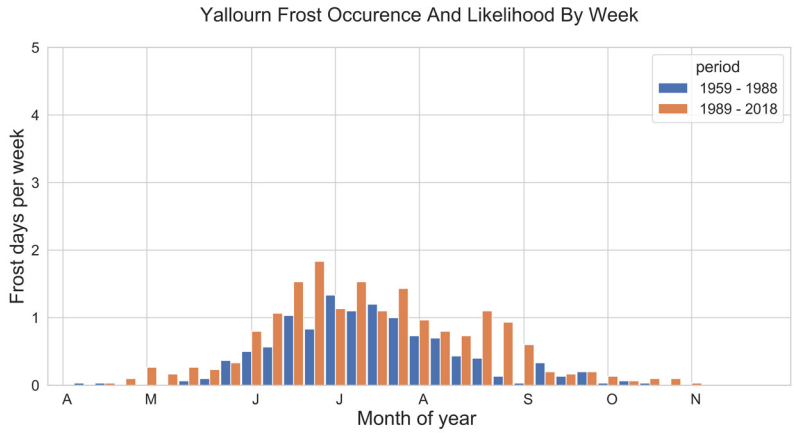
Later and more frequent frosts

The number of potential frosts has increased at Sale and Traralgon between 1989–2018 (orange bars) compared with 1959–1988 (blue bars). The increase is most notable in the Traralgon area.

In Yallourn, 20 km west of Traralgon, frost frequency has increased in late winter and early spring, with an average of eight more days with the potential for frost between 1989–2018 compared to 1959–1988.

Traralgon's frost risk typically ends by the start of November. Sale can experience frosts through October and has experienced two potential frost nights in November since 1989. The latest potential frost night recorded for Sale was the 27 November 2015. More frosty nights tend to occur through dry winter and spring periods, when soil moisture is low, and cloud cover infrequent. On average, Sale, for example, has nine more frost nights during a dry winter than during a wet winter.



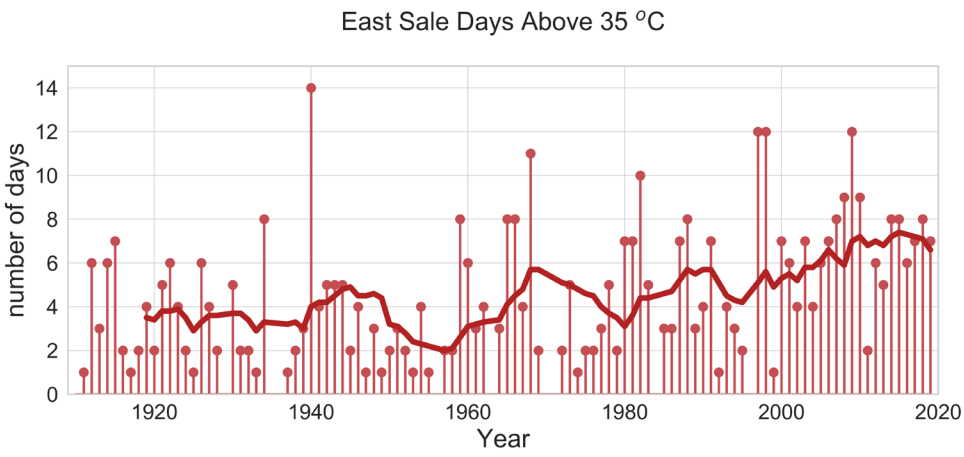


Temperature

West Gippsland has experienced more hot days in the past 30 years

The chart shows the annual number of days above 35 °C (red bars) with a 10-year running average (solid red line) for East Sale. East Sale experienced an average of six days per year above 35 °C between 1989–2018, compared to an average of four days per year above 35 °C per year from 1945–1988. The maximum temperature recorded was 44.6 °C in 1982.

East Sale experiences on average two nights per year of greater than 20 °C. In 1959, East Sale experienced an exceptional five nights where the minimum temperature did not drop below 20 °C.



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