

Barwon, Leigh and Moorabool Basin – Local Water Report 2019

Welcome to our annual Local Water Report for our Barwon, Leigh and Moorabool Basin customers. This report provides information on:

- how our rivers fared last season (2018-19);
- groundwater level trends;
- the number of irrigation licences in each of our systems;
- how much water irrigators used last season, compared with previous years; and
- emerging local water issues.

What's happened with your local rivers?

The Barwon system has again experienced slightly below average rainfall for the winter and a below average rainfall pattern for spring. Rivers are experiencing flows similar to that of last year with some higher flows, particularly on the Moorabool River, maintaining above average winter average flows. Most winterfill licences on the Barwon, Leigh and Moorabool Rivers would have been able to take their full allocation.

Restrictions on both the Barwon and Moorabool Rivers will be managed closely as flows reduce and will align with the CMA's environmental releases to allow these pulses to pass without a lifting of any bans outside of natural flows.

Moorabool River

An extended dry summer resulted in total bans for the summer and the autumn period, with these bans remaining in place until early May 2019.

The below table show the restrictions for the 2018-19 season:

| Stage | Total days |
|-------------------------------|-------------------|
| Stage 1 (100% No restriction) | |
| Stage 2 (25%) | |
| Stage 3 (50%) | 9 |
| Stage 4 (75%) | |
| Stage 5 (Total ban) | 187 |

Leigh River

Run off from Ballarat South and inflows of treated water from the Ballarat South Treatment Plant resulted in no restrictions for the 2018-19 season.

The table below shows the restrictions for the 2018-19 season:

| Stage | Total days |
|-------------------------------|-------------------|
| Stage 1 (100% No restriction) | NIL |
| Stage 2 (25%) | |
| Stage 3 (50%) | |
| Stage 4 (75%) | |
| Stage 5 (Total ban) | |

Barwon River

A rapid move into dry conditions over the summer and early autumn resulted in an extended period of total bans on all sections of the Barwon River, with lifting of restrictions only occurring in early May.

The below table show the restrictions for the 2018-19 season.

Zone 1. (Data monitored at Ricketts Marsh gauging station – Upper Barwon)

| Stage | Total days |
|-------------------------------|-------------------|
| Stage 1 (100% No restriction) | 102 |
| Stage 2 (25%) | |
| Stage 3 (50%) | |
| Stage 4 (75%) | |
| Stage 5 (Total Ban) | |

Zone 2. (Data monitored at Inverleigh gauging station – Middle Barwon)

| Stage | Total days |
|-------------------------------|-------------------|
| Stage 1 (100% No restriction) | 102 |
| Stage 2 (75%) | |
| Stage 3 (50%) | |
| Stage 4 (25%) | |
| Stage 5 (Total Ban) | |

Zone 3. (Data monitored at Pollocksford gauging station – Lower Barwon)

| Stage | Total days |
|-------------------------------|-------------------|
| Stage 1 (100% No restriction) | 11 |
| Stage 2 (75%) | |
| Stage 3 (50%) | |
| Stage 4 (25%) | |
| Stage 5 (Total Ban) | |

Rosters and restrictions

When river, creek and groundwater levels drop, we often have to introduce rosters, restrictions or bans to ensure a fair distribution of available water to all licence holders.

You can find your area's hotline number and local management rules by visiting www.srw.com.au/customer/rosters-and-restrictions

Surface water figures

The table below compares last season's usage with the previous four years

| River System ¹ | Number of licences | Licensed volume (ML) | Total Volume Extracted (ML) | | | | |
|---------------------------|--------------------|----------------------|-----------------------------|--------------|--------------|--------------|--------------|
| | | | 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| Barwon River | 192 | 5553.1 | 1,028 | 1,213 | 1,756 | 1,615 | 1,173 |
| Moorabool River | 152 | 3611.0 | 1,344 | 999 | 977 | 1,240 | 1,190 |
| Totals | 344 | 9164.1 | 2,372 | 2,212 | 2,733 | 2,855 | 2,363 |

¹ Does not include farm dam registrations

What happened with your local groundwater last season?

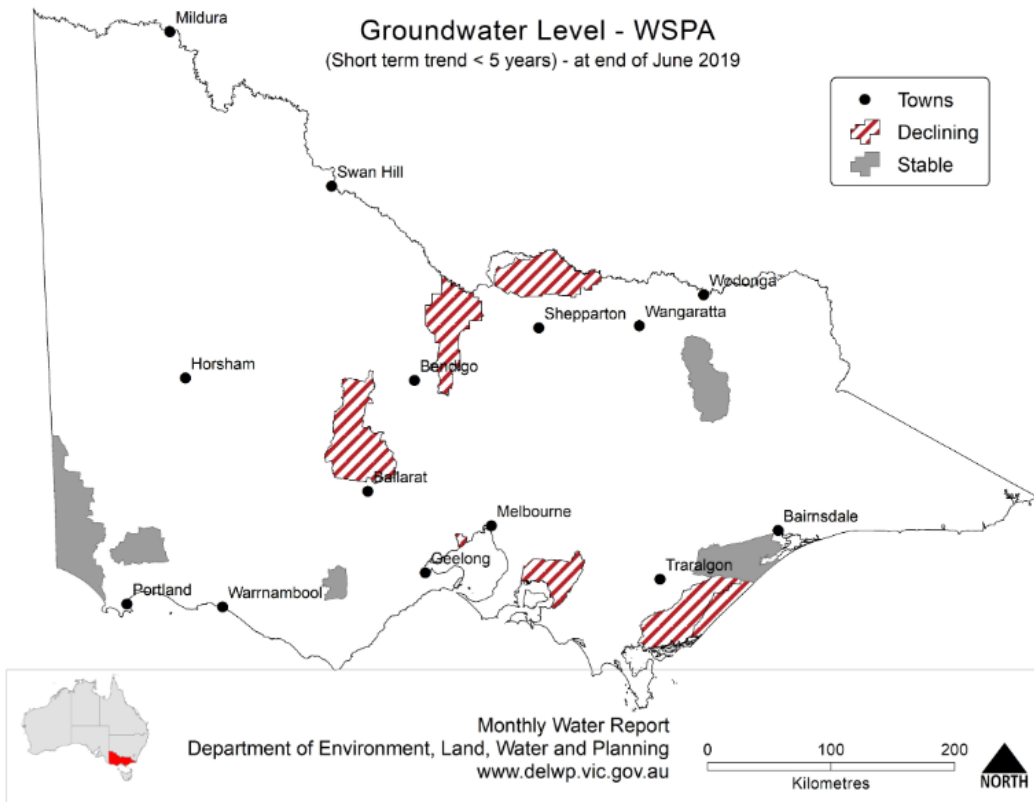
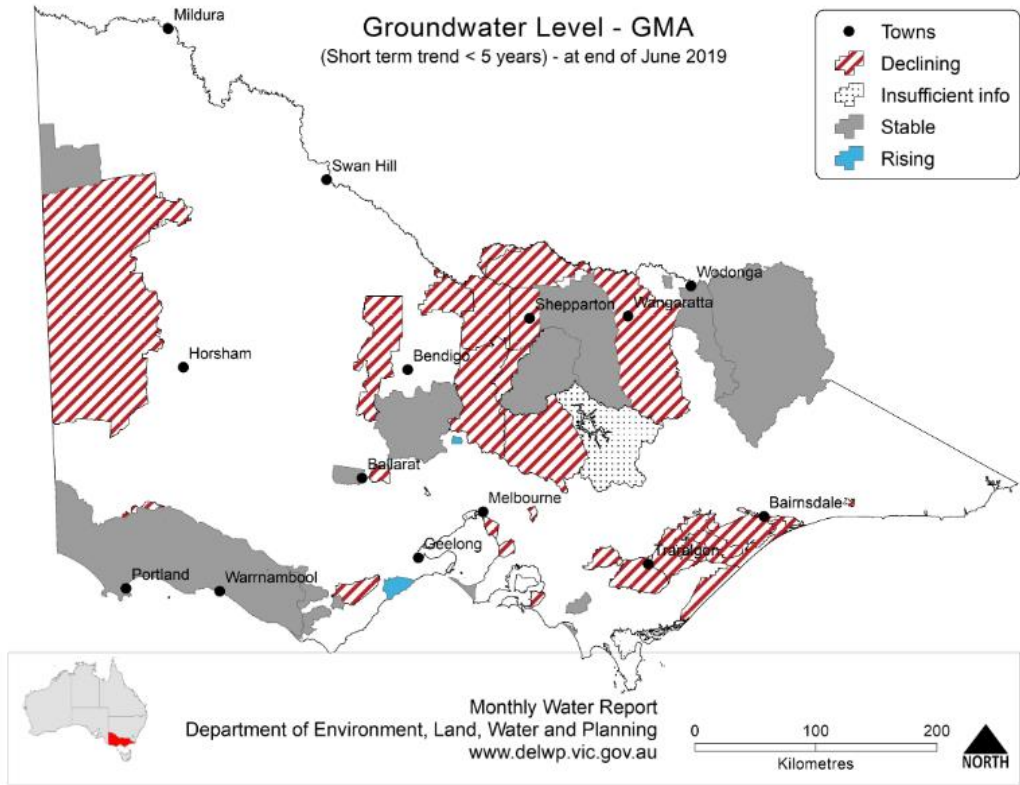
Overview

There are three Groundwater Management Units within the Barwon and Moorabool Basins (Bungaree, Gerangamete and Cardigan). Gerangamete is a deep sand aquifer and the other aquifers in these areas are thick basalt and deep leads. The deep leads are ancient river beds, and the basalt is from local volcanoes, such as Mt Warrenheip.

The water quality in these aquifers is generally very good. The main use is for irrigation.

A bedrock aquifer also exists across the basin, but has limited quality and yield and is generally only used for domestic and stock purposes. The Department of Environment, Land, Water and Planning (DELWP) has a good spread of State Observation Bores in these areas.

Follow this [link](#) if you would like to know more about groundwater management in your area.



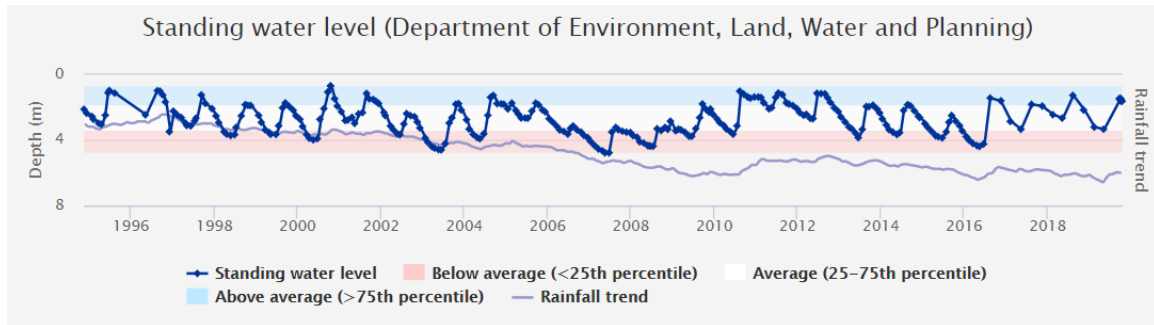
Use this [link](#) to view groundwater trends across Victoria.

Bungaree

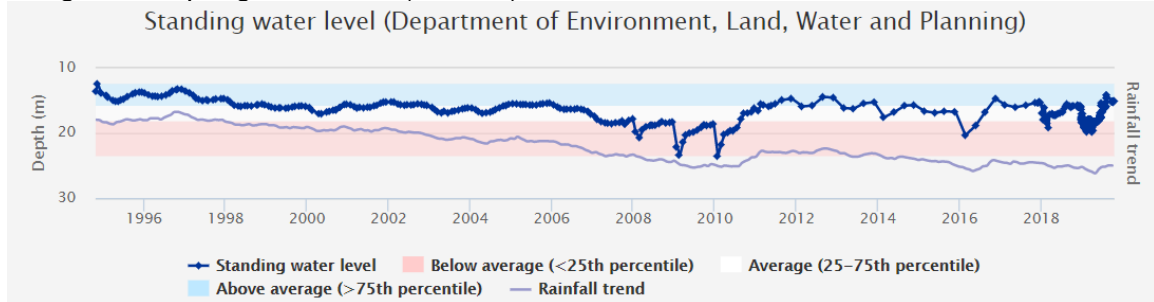
Bungaree GMA received 846mm of rain at the Glen Park rain gauge station which was close to the long term average of 863mm.

Groundwater usage last year was 3,245ML compared to the long term average of 2,782ML.

Average water levels this year are within the long term average (25-75th percentile).



Bungaree – Springbank Road ([119340](#))



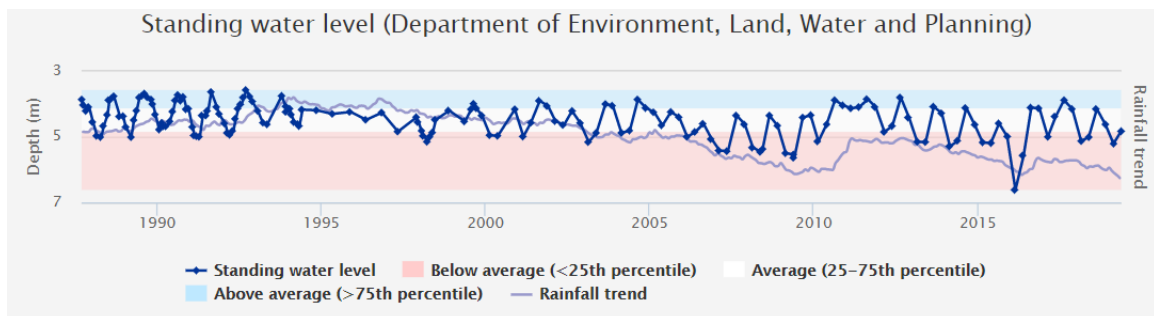
Bungaree - Murphy's Road ([119337](#))

Cardigan

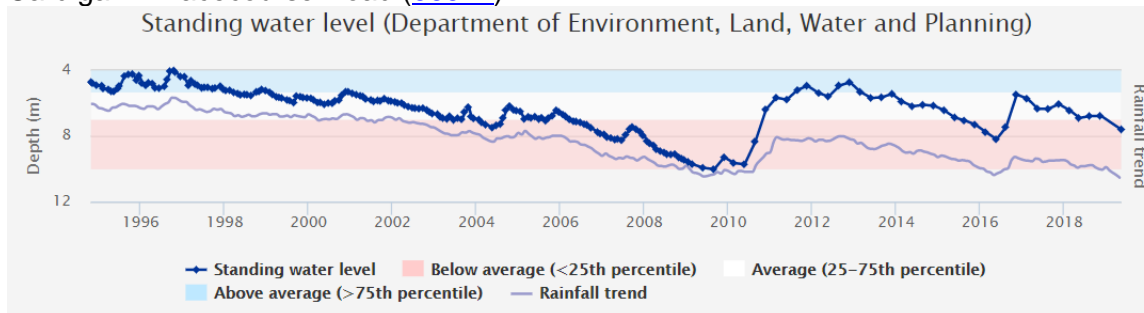
Cardigan GMA received 604mm of rain at the Ballarat Aerodrome rain gauge station which was approximately 80mm less than the long term average of 688mm.

Groundwater usage last year was 931ML compared to the long term average of 673ML.

Water levels this year are average to below average.



Cardigan – Racecourse Road ([66622](#))



Cardigan – Draffin's Road ([122382](#))

Gerangamete

Gerangamete GMA received 610mm of rain at the Barwon Downs rain gauge station which was approximately 70mm more than the long term average of 543mm. Groundwater usage last year was 0ML compared to the long term average of 3,504ML. Water levels are presented in the Barwon Water annual report. Please click [here](#) to view the latest report.

The licenced volumes for Gerangamete will reduce significantly in the 2019-20 report due to Barwon Water not renewing their groundwater licence for the GMA.

To find out more information about the bore depths in your area visit https://www.vvg.org.au/vvg_map.php

Groundwater figures

The table below compares last season's usage with the previous four years

| Groundwater system | Number of licences | Licensed volume (ML) | Total Volume Extracted (ML) | | | | |
|--------------------|--------------------|----------------------|-----------------------------|--------------|--------------|---------------|--------------|
| | | | 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| Bungaree GMA | 97 | 5,253 | 3,245 | 2,938 | 2,290 | 3,074 | 2,261 |
| Cardigan GMA | 20 | 3,887 | 931 | 742 | 751 | 933 | 784 |
| Gerangamete GMA | 4 | 8,239 | 0 | 3 | 1,546 | 1,846 | 0 |
| Unincorporated | 89 | 10,802 | 3,544 | 4,115 | 3,907 | 4,149 | 3,548 |
| Totals | 210 | 28,181 | 7,720 | 7,798 | 8,494 | 10,002 | 6,593 |

Water trading for 2018-19

The table below shows the number and volume (ML) of water trades. Temporary and permanent volume trades show water trades across different locations, as distinct from ownership changes that are part of land transfers.

Previous years water trade ML volumes , numbers and traded price can be found at: <http://waterregister.vic.gov.au/water-trading/take-and-use-licence-trading>

| Basin / GMU | Permanent trade | | Temporary trade | |
|-----------------|-----------------|-------------|-----------------|-------------|
| | Number | Volume (ML) | Number | Volume (ML) |
| Moorabool Basin | 2 | 28 | 4 | 103.3 |
| Barwon Basin | 6 | 272.4 | 5 | 315 |
| Bungaree GMA | 0 | 0 | 9 | 116 |
| Cardigan GMA | 0 | 0 | 0 | 0 |

More information

For more information about rural water use in your area, please contact your local field officer, **Greg Bensted (Colac) on 0437 074 768** or phone Southern Rural Water on 1300 139 510.

Southern Rural Water is publishing local water reports for all basins. You can view these online at our website (www.srw.com.au).

PLEASE DON'T DRINK OUR WATER

ANY water from sources managed or licensed by Southern Rural Water, including irrigation storages, channels, rivers and creeks, groundwater and farm dams, is untreated. It should not be considered safe for human consumption without proper treatment.