

Mid-Loddon Groundwater Management Area

Groundwater management

The Mid-Loddon Groundwater Management Area (the GMA) extends from Tullaroop Reservoir in the south to Mitiamo in the north. Groundwater resources are managed under the *Mid-Loddon Groundwater Management Area Local Management Rules* (the Rules) which was approved by Goulburn-Murray Water (GMW) in 2009.

An overall cap, termed a Permissible Consumptive Volume (PCV) of 34,037 ML/yr was declared for the GMA in March 2013.

At 30 June 2020, the total of licensed groundwater entitlement volume (licensed volume) in the GMA was 33,927.1 ML/yr. This is unchanged since 30 June 2019.

Allocations

In the 2019/20 water year, all management zones in the GMA had an allocation of 100 per cent of licensed volume. Allocations of 100 per cent have also been announced for 2020/21, based on the highest groundwater levels to 5 July 2020 (Figure 1).

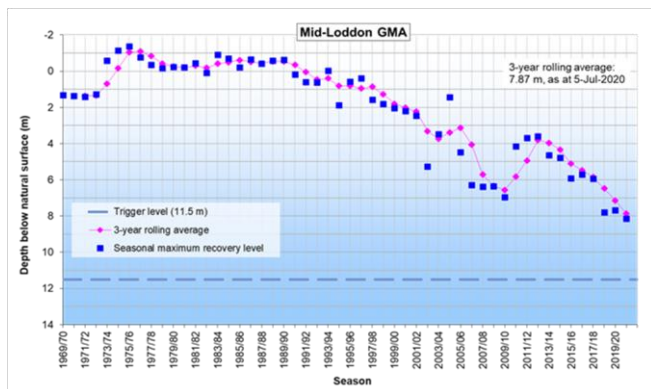


Figure 1. Three-year rolling average of maximum recovery levels, compared to the trigger level

Groundwater use

Recorded use in the GMA was 20,147 ML in 2019/20 which equates to 59 per cent of the total licensed volume (Figure 2). This is a 20 per cent decrease on the volume used in 2018/19.

Carryover

Licence holders in the GMA are permitted to carryover up to 30 per cent of their licensed volume from one water year to the next. There was 7,715 ML of carryover

available for use in the 2019/20 water year. The volume that has been carried over into 2020/21 is 9,764 ML.

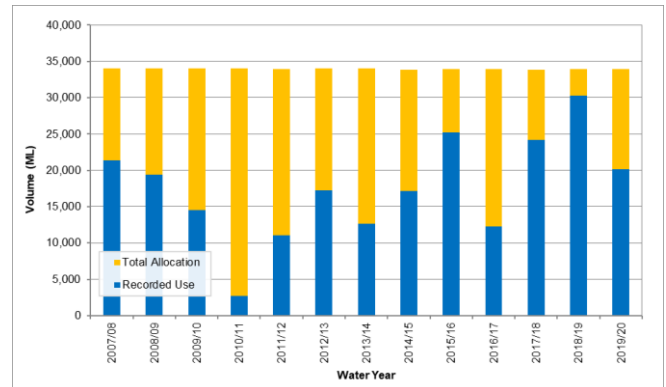


Figure 2. Recorded groundwater extractions

Licence transfers

During the 2019/20 water year there were 13 temporary transfer transactions for a total of 1,430 ML and two permanent transfer transactions for a total of 140 ML/yr (Figure 3).

Of the 13 temporary transfers completed, eight were from the Laanecoorie-Serpentine Zone to the other management zones. The two permanent transfers occurred within the Laanecoorie-Serpentine Zone.

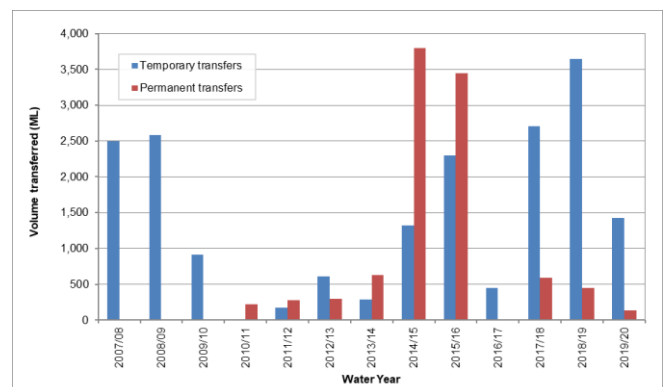


Figure 3. Groundwater trading activity

Licence holders are reminded not to extract more than their allocated volume without written approval from GMW and should apply to transfer well in advance of requiring additional water.

Licence holders seeking to trade groundwater licence entitlement should visit Watermatch, an online trading forum for people to buy and sell water:

www.watermatch.com.au

Groundwater levels

A total of 47 state observation bores, located within the GMA, were monitored by GMW and the Department of Environment, Land, Water and Planning (DELWP) in 2019/20.

Of these, 36 were monitored remotely using telemetry equipment, with measurements recorded hourly, and 11 were monitored manually, with measurements recorded on a monthly or quarterly basis.

Monitoring data indicate that groundwater levels were within historic ranges during 2019/20, across the majority of the GMA.

At Moolort, the groundwater level in deep lead observation bore 138653 recovered to 5.1m lower in 2019/20, compared to 2018/19 (24.3m down from 19.2m depth). However, the magnitude of drawdown was 6 m, compared to 13.1m in 2018/19 (Figure 4).

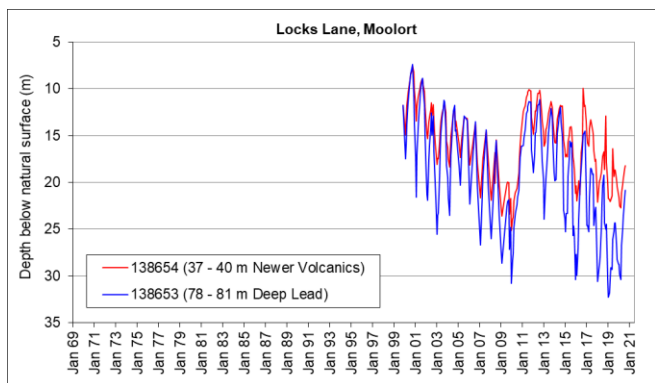


Figure 4. Groundwater level monitoring at Moolort

The maximum groundwater recovery level in the allocation trigger bore (88214), located on Rothackers Road near the Pompapiel Creek, changed by just 4cm between 2018/19 and 2019/20 (7.8m to 7.76m depth); and the magnitude of drawdown was also comparative (10.6m, compared to 10.9m) (Figure 5).

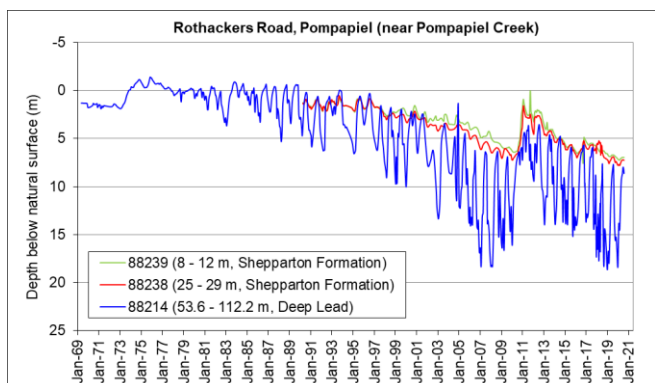


Figure 5. Groundwater level monitoring at Pompapiel

At Calivil, the highest groundwater level recorded in deep lead observation bore 54343 during 2019/20 was 5.14m; 2m lower than the highest level observed in 2018/19.

The magnitude of drawdown was 11.8m which is the second largest since records began in the early 1970s. In March 2020, groundwater levels reduced to 16.97m below the surface which is the lowest level on record (Figure 6).

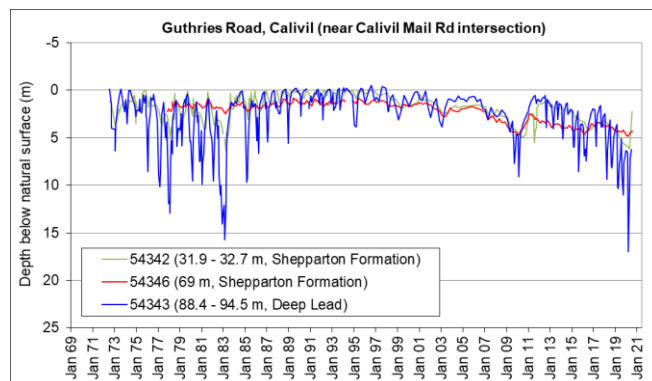


Figure 6. Groundwater level monitoring at Calivil

Groundwater quality

Two deep lead observation bores, located within the GMA, were sampled and analysed in October 2019. Groundwater salinity results were within historic ranges (Figure 7). Ongoing annual sampling of these bores will enable any trends in groundwater quality to be observed.

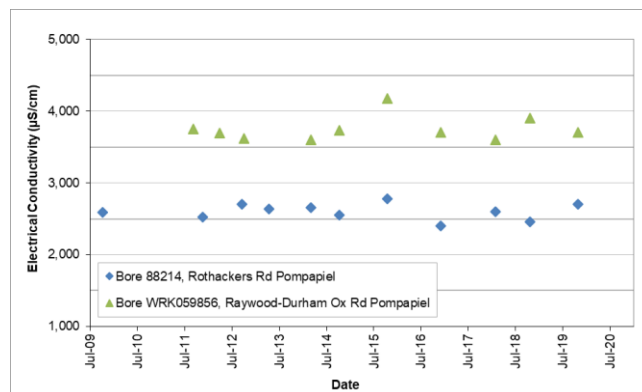


Figure 7. Groundwater salinity monitoring

GMW provides all groundwater licence holders in the GMA with a sample bottle and a reply-paid envelope to submit a groundwater sample for salinity analysis. In 2019/20, 129 sample bottles were sent out and 29 samples (22 per cent) were returned for analysis.

Generally, the salinity of groundwater samples collected in 2019/20 were slightly less than their 2018/19 equivalent.

Where can I get more information?

You can download a copy of the *Mid-Loddon GMA Local Management Rules* or the 2019/20 Annual Report from the GMW website at www.gmwater.com.au, or phone 1800 013 357.