

2024 ANNUAL NEWSLETTER

Mid-Loddon Groundwater Management Area

Groundwater management

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

At 30 June 2024, the total licence entitlement volume (licence volume) in the GMA was 33,927.1 ML/yr – this is unchanged from 30 June 2023.

Allocations

On 10 August 2023, an allocation of 100 per cent was announced for all groundwater licence holders in the GMA for the 2023/24 water year based on the highest groundwater level in the trigger bore between 1 July and 31 July 2023 (Figure 1).

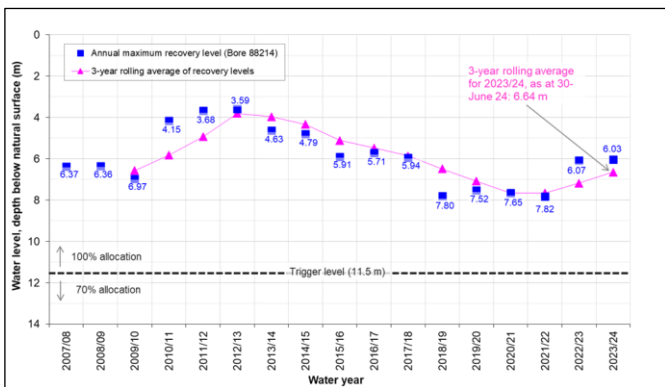


Figure 1. Allocations trigger graph

Groundwater use

Recorded use in the GMA was 19,157.6 ML in 2023/24 which equates to 56 per cent of the total licence volume (Figure 2).

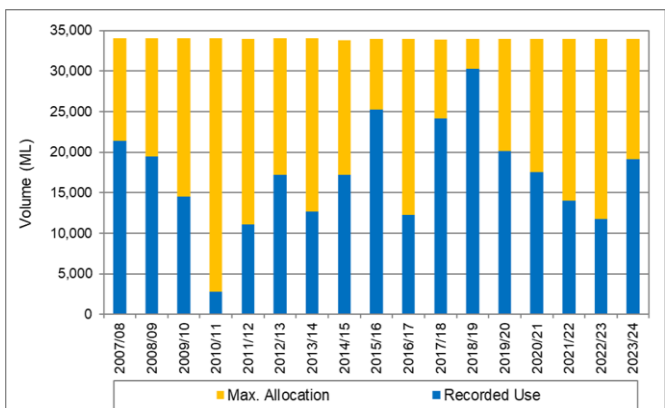


Figure 2. Recorded use compared to licence volume

Licence transfers

During the 2023/24 water year there were nine temporary transfer transactions, for a total of 1794.0 ML; and four permanent transfer transactions for a total of 263.0 ML were completed (Figure 3).

All permanent transfers completed were within the same management zone, of the nine temporary transfers six were between licence holders within the same management zone; there were two temporary transfer totalling 950.0 ML/yr from Laanecoorie-Serpentine Zone to Moolort Zone (Table 3).

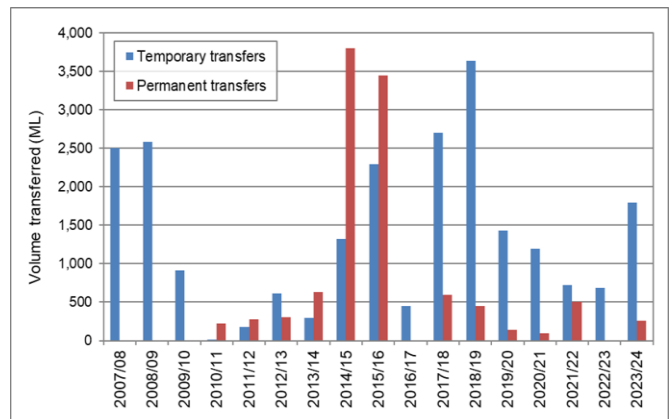


Figure 3. Annual volumes of licence transfers

Carryover

Licence holders in the GMA are permitted to carryover up to 30 per cent of their licence volume from one water year to the next.

A total of 10,090.9 ML was carried over to the 2023/24 water year by licence holders in the GMA. At the conclusion of 2023/24, 10,033.0 ML was able to be carried over for use in the 2024/25 water year.

Groundwater levels

A total of 48 State observation bores, located within the GMA were monitored by GMW and the Department of Energy, Environment and Climate Action (DEECA) in 2022/23. Of these, 34 were monitored remotely using telemetry equipment, with measurements recorded hourly; and 14 were monitored manually, with measurements recorded at either one-month or three-month intervals.

At Moolort, the groundwater level in Deep Lead observation bore 138653 recovered to a level 0.4 m higher (i.e., closer to the surface) in 2023/24, compared to 2022/23 – 14.6 m depth below natural surface

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(DBNS), up from 15.0 m. The level of maximum drawdown in 2023/24 was 29.0 m DBNS, occurring in March 2024; this was marginally lower than the 2022/23 level (28.8 m DBNS) which also occurred in month of March (Figure 7).

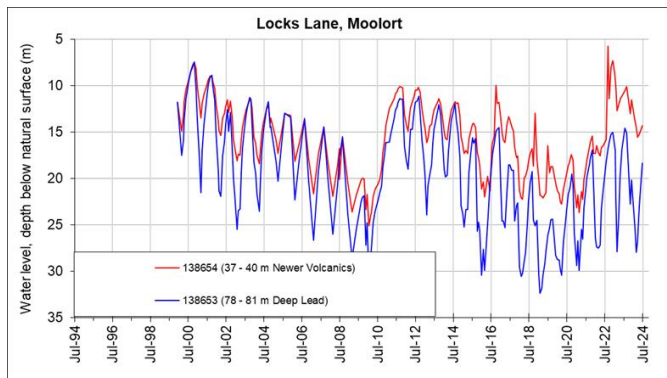


Figure 4. Groundwater level monitoring at Moolort

The maximum recovery level in the allocations trigger bore (ID 88214), located on Rothackers Road near Pompapiel Creek, was 1.41 m lower than the maximum of 2022/23 (7.44 m DBNS, compared to 6.03 m). As a result of the observed water level in 2023/24 reaching a maximum drawdown level greater than that of 2022/23 (19.30 m DBNS, versus 16.49 m), the magnitude of drawdown was greater – 12.81 m, compared to 10.08 m (Figure 5).

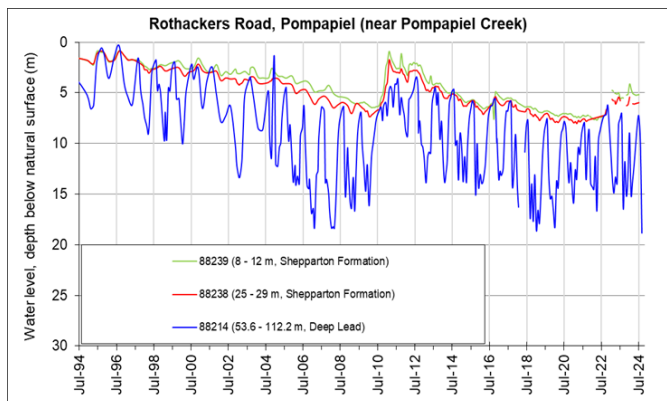


Figure 5. Groundwater level monitoring at Pompapiel

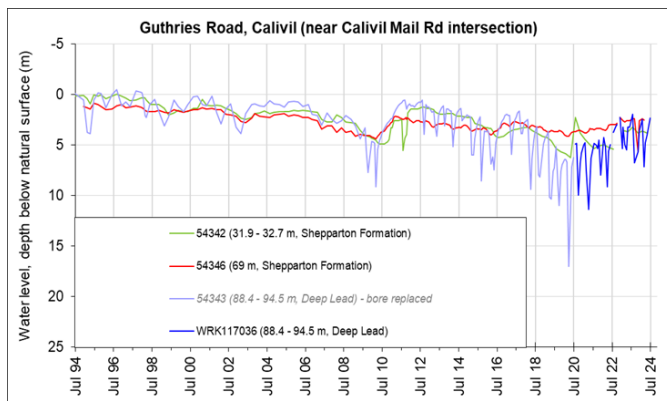


Figure 6. Groundwater level monitoring at Calivil

At Calivil, the highest groundwater level recorded in deep lead observation bore WRK117036 (which replaced bore 54343 in August 2020) during 2023/24 (i.e., the maximum recovery level) was 1.95 m DBNS; 0.32 m higher than the 2022/23 level and the highest since 2017/18. The magnitude of drawdown was 7.1 m which is the highest since 2013/14 when the lowest recorded level was 5.12 m DBNS Figure 6).

Groundwater quality

Two deep lead observation bores, located within the GMA, were sampled and analysed in November 2023. Groundwater salinity results were within historic ranges (Figure 7). Ongoing annual sampling of these bores will enable trends in groundwater quality to be observed.

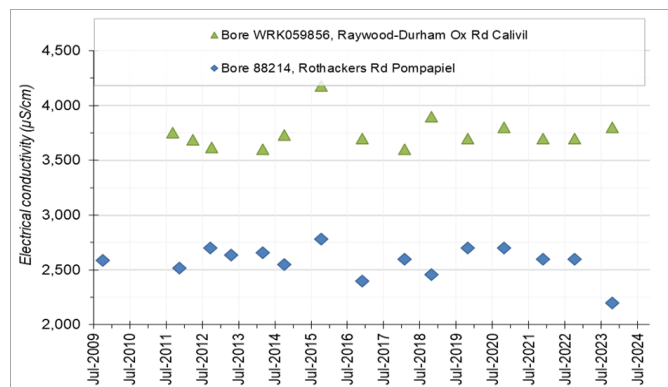


Figure 7. Groundwater salinity monitoring at Calivil and Pompapiel

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 2023/24, 128 sample bottles were sent out and 20 samples (or 16 per cent) were returned for analysis.

The salinity of groundwater samples collected in 2023/24 were similar to previous results.

Licence compliance

In 2023/24, there were no prosecutions or convictions relating to groundwater matters in the GMA.

GMW has a zero-tolerance approach to unauthorised take of non-urban water. GMW will investigate these reports and take action in accordance with GMW’s Risk-Based Compliance and Enforcement Framework.

Please visit www.gmwater.com.au/compliance for more information.

For all groundwater levels and data please visit <https://data.water.vic.gov.au/>

Where can I get more information?

You can download a copy of the Rules, the 2023/24 annual report and other resources from the GMW website at www.gmwater.com.au/midloddongma