

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 in the Mid-Loddon GMA are managed under the Local Management Rules (the Rules) which were approved by Goulburn-Murray Water (GMW) in 2009.

Allocations

There is 33,927 ML/yr of licence volume in the Mid-Loddon GMA. Allocations in 2017/18 were 100%. Allocations in 2018/19 are also 100% as groundwater levels to August 2018 are above the trigger level (Figure1).

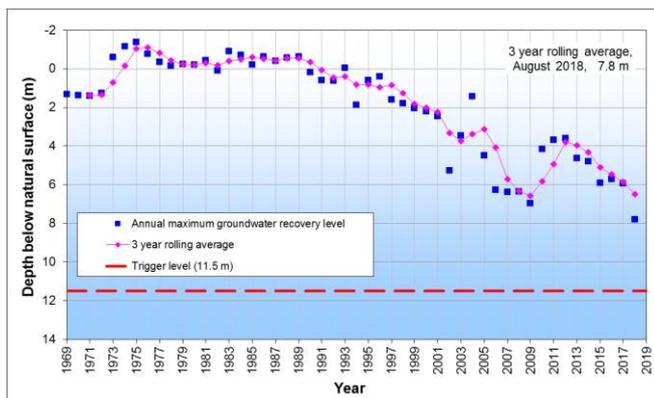


Figure 1 Three year rolling average maximum groundwater recovery level compared to trigger level

Groundwater use

Recorded use in the Mid-Loddon GMA in 2017/18 was 24,152 ML, or 71 % of total licence volume (Figure 2). This is well above average.

Carryover

Licence holders may carryover up to 30% of their licence volume in the Mid-Loddon GMA. There was 9,913 ML of carryover available in the 2017/18 season. The volume that has been carried over into 2018/19 is 8,714 ML.

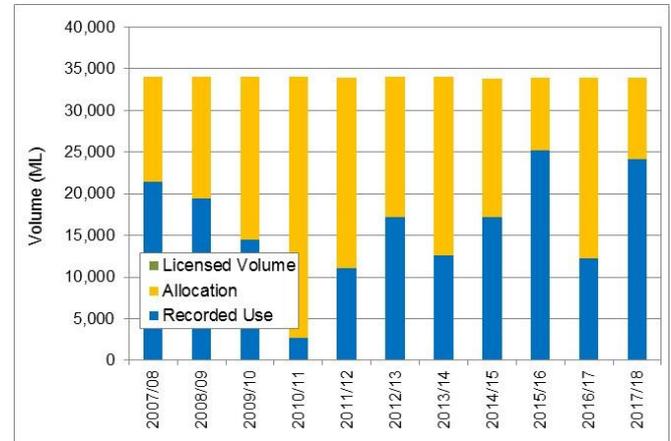


Figure 2 Recorded groundwater use

Trading

There were 16 temporary transfers for a total of 2,705 ML and three permanent transfers for a total of 594 ML/yr in 2017/18 (Figure 3).

Temporary transfers were associated with all of the management zones and the three permanent transfers were between or into the Laanecoorie-Serpentine Zone.

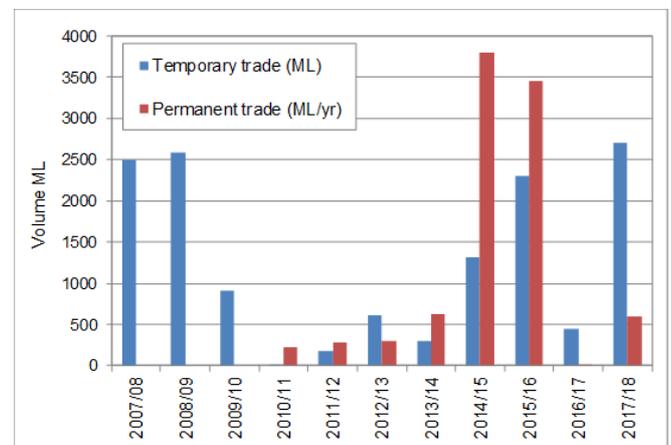


Figure 3 Groundwater trading activity

Licence holders are reminded not to extract more than their licence volume without first obtaining approval from Goulburn-Murray Water and should apply to transfer well in advance of requiring the water.

Licence holders that want to trade groundwater should visit Watermatch, an on-line forum where people can advertise at www.watermatch.com.au/

Groundwater levels

GMW, in conjunction with the Department of Environment, Land, Water and Planning, monitor groundwater levels in 47 State observation bores in the Mid-Loddon GMA. Groundwater levels have been declining since the wet conditions in 2010/11, but remain within historical ranges.

In the Moolort Zone, groundwater recovery levels declined by around 3.9 m in 2017/18 to 18.6 m depth at bore 138653, with seasonal drawdown of 12 m (Figure 4).

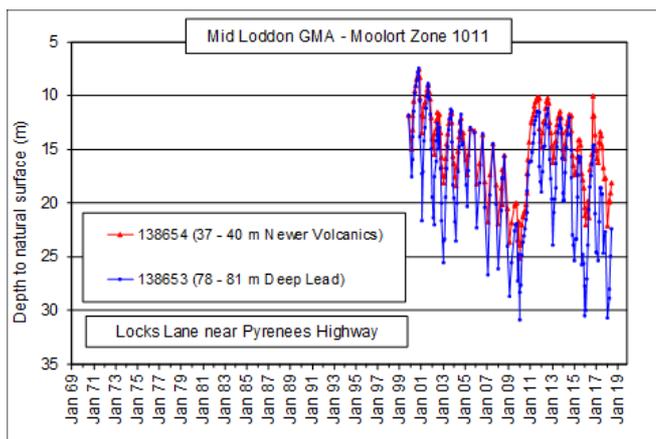


Figure 4 Hydrographs for nested bores in the Moolort Zone

In the Laanecoorie-Serpentine Zone, groundwater recovery levels declined by 0.3 m in 2017/18 to 6.1 m below the natural surface in trigger bore 88214 on Rothackers Road, with seasonal fluctuation of around 11.6 m (Figure 5).

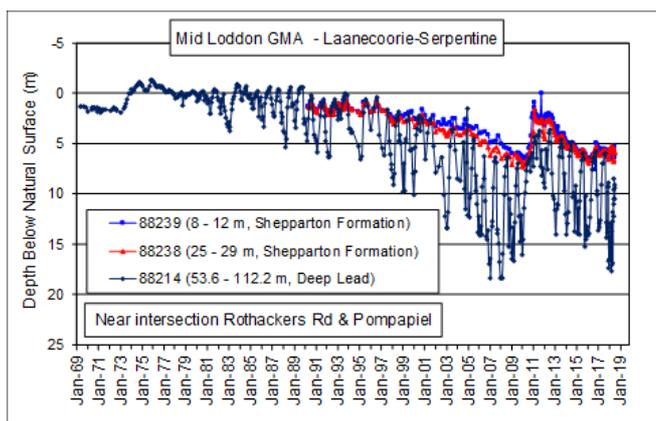


Figure 5 Hydrographs for nested bores in the Laanecoorie-Serpentine Zone

In the Jarklin Zone, groundwater recovery levels rose by 0.2 m in 2017/18 to 1.8 m below the natural surface in bore 54343, with seasonal fluctuation of around 7.52 m (Figure 6).

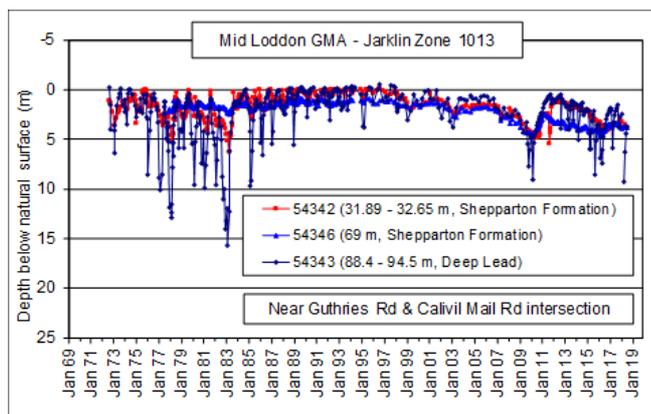


Figure 6 Hydrographs for nested bores in Jarklin Zone

Groundwater quality

Groundwater salinity is recorded from key State observation bores in the north of the Mid-Loddon GMA. The results were within the historical range (Figure 7). Ongoing annual sampling of these bores will enable any trends in groundwater quality to be observed.

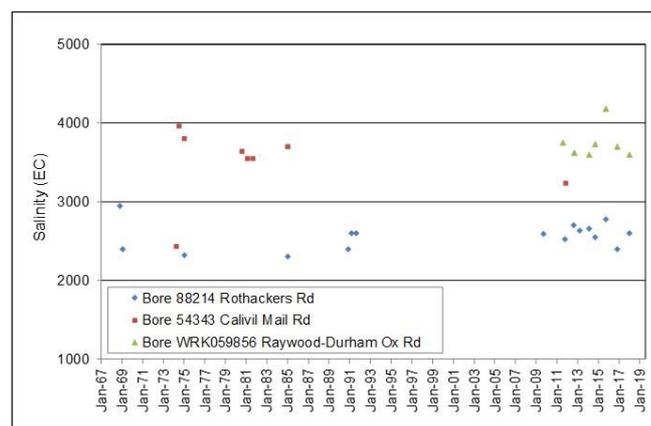


Figure 7 Groundwater salinity

GMW sent bottles to groundwater users to collect a sample for salinity analysis. Unfortunately only 27 (22%) of samples were returned. Results indicate that groundwater salinity levels are within the expected range in each zone.

Where can I get more information?

You can download a copy of the Mid-Loddon GMA Local Management Rules or the annual report from the GMW website www.gmwater.com.au, or call 1800 013 357.