

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 2018/19 were 100%. Allocations in 2019/20 are also 100% as groundwater levels to August 2019 are above the trigger level (Figure1).

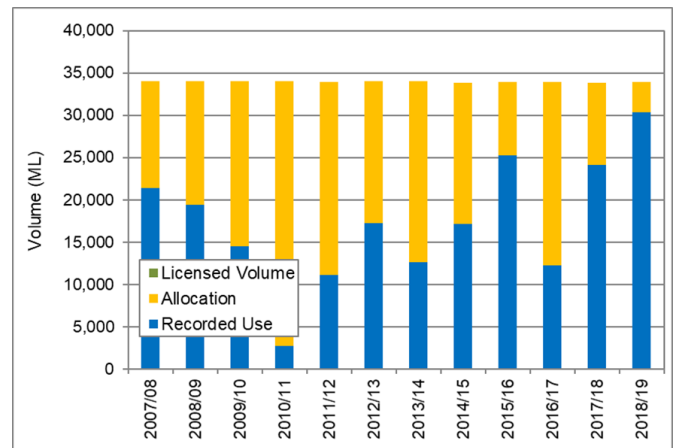


Figure 2 Recorded groundwater use

Trading

There were 23 temporary transfers for a total of 3,641 ML and three permanent transfers for a total of 447 ML/yr in 2018/19 (Figure 3).

Temporary transfers were associated with all of the management zones and the one permanent transfer was between from the Laanecoorie-Serpentine Zone to the Moolort Zone.

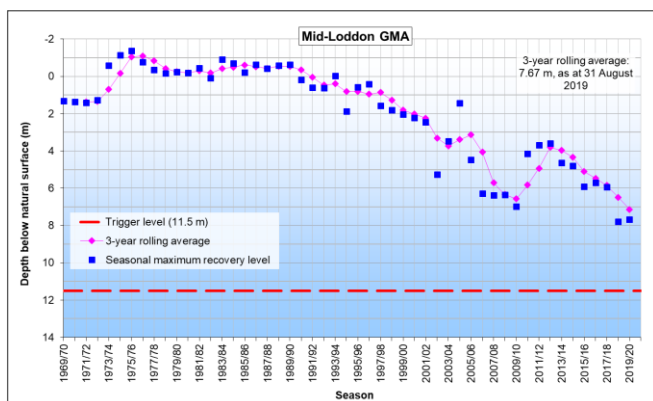


Figure 1 Three year rolling average maximum groundwater recovery level compared to trigger level

Groundwater use

Recorded use in the Mid-Loddon GMA in 2018/19 was 30,300 ML, or 89% of total licence volume (Figure 2). This is the highest use ever recorded for the GMA.

Carryover

Licence holders may carryover up to 30% of their licence volume in the Mid-Loddon GMA. There was 8,714 ML of carryover available in the 2018/19 season. The volume that has been carried over into 2019/20 is 7,715 ML.

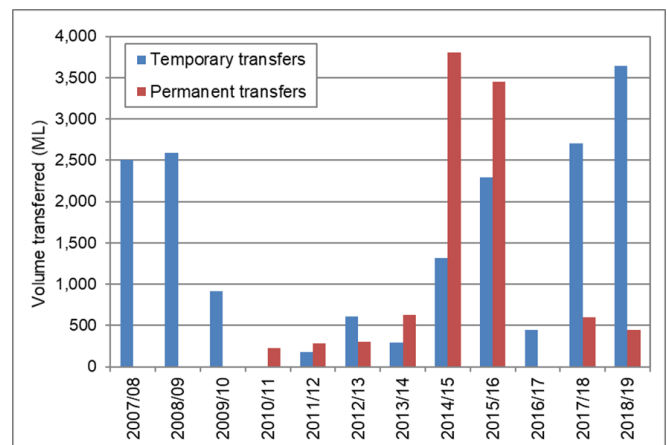


Figure 3 Groundwater trading activity

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 (DELWP), 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, with levels now back to where they were in 2009/10.

In the Moolort Zone, groundwater recovery levels declined by a further 0.68 m in 2018/19 to 19.2 m depth at bore 138653, with a seasonal fluctuation of 13.1 m (Figure 4).

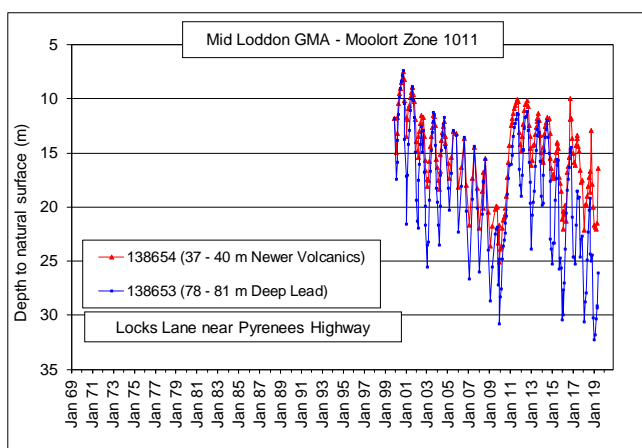


Figure 4 Hydrographs for nested bores in the Moolort Zone

In the Laanecoorie-Serpentine Zone, groundwater recovery levels declined by 1.86 m in 2018/19 to 7.8 m below the natural surface in trigger bore 88214 on Rothackers Road, with a seasonal fluctuation of 10.9 m (Figure 5).

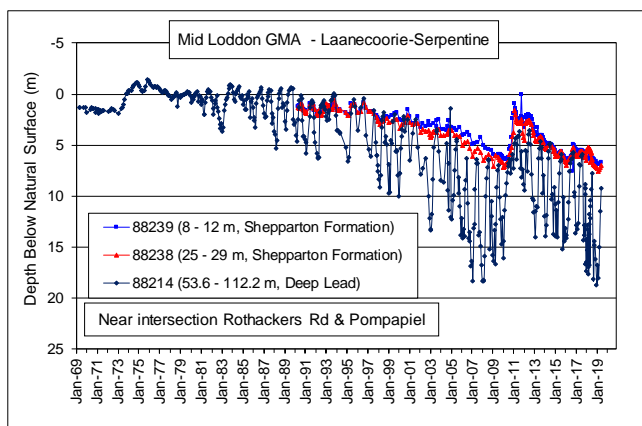


Figure 5 Hydrographs for nested bores in the Laanecoorie-Serpentine Zone

In the Jarklin Zone, groundwater recovery levels declined by 1.5 m in 2018/19 to 3.1 m below the natural surface in bore 54343, with a seasonal fluctuation of 10.4 m (Figure 6).

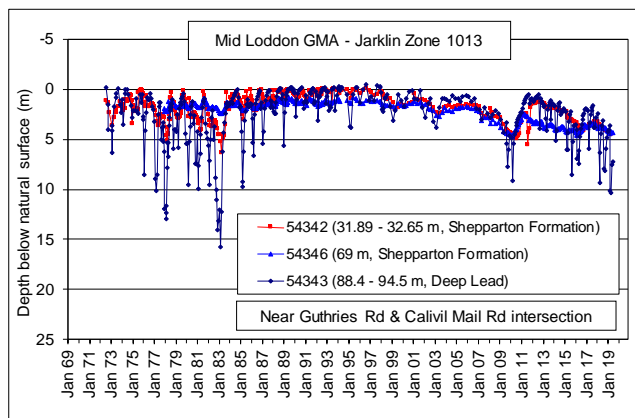


Figure 6 Hydrographs for nested bores in Jarklin Zone

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.

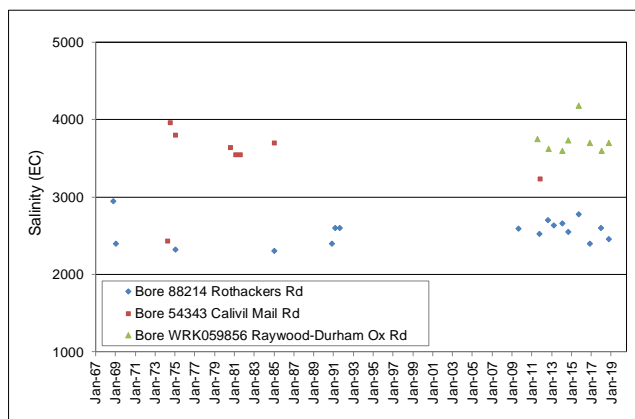


Figure 7 Groundwater salinity

GMW sent bottles to groundwater users to collect a sample for salinity analysis. There were 36 samples returned (29%) for 2018/19. Results indicate a marginal increase in salinity levels in those bores also sampled the previous year.

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.