



Mid-Loddon GMA

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 33,831 ML/year of licence entitlement in the Mid-Loddon GMA. Allocations in 2014/15 were 100%. Allocations in 2015/16 are also 100% as groundwater levels are well above the trigger level (Figure 1).

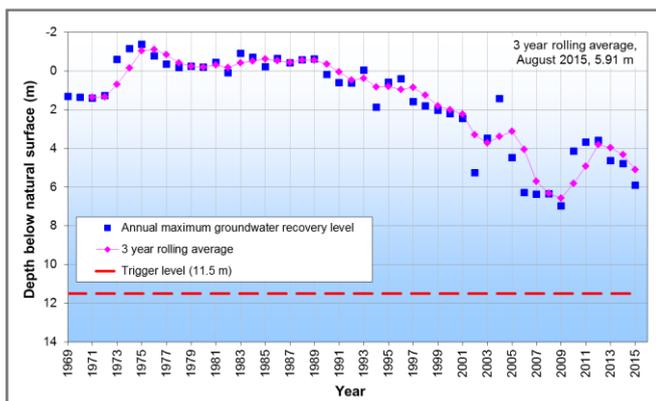


Figure 1. Three year rolling average maximum groundwater recovery level compared trigger level

Groundwater use

Metered use in the Mid-Loddon GMA in 2014/15 was 17,165 ML, or 51 % of total licence entitlement. This is within the range of historical use (Figure 2).

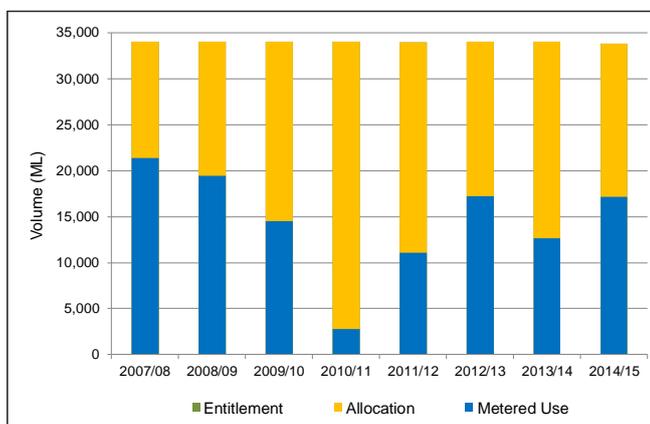


Figure 2. Metered groundwater extractions

Licence transfers

There were seven temporary transfers for a total of 1,318 ML/yr and four permanent transfers for a total of 3,800 ML/yr in 2014/15 (Figure 3). The substantial volume of permanent trade was mostly due to a single licence holder selling a large volume of licence entitlement.

Most of the water was transferred within the same zone. There was 200 ML/yr permanently transferred out of the Laanecoorie-Serpentine Zone into the Moolort Zone.

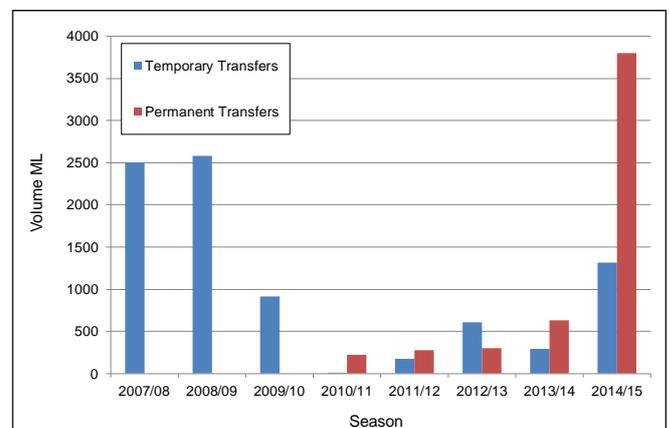


Figure 3. Groundwater licence transfers

Transferring groundwater licence entitlement can provide an opportunity to generate income from unused entitlement for sellers; or increase production for buyers.

Licence holders are reminded not 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.

Carryover

Licence holders may carryover up to 30% of their licence volume in the Mid-Loddon GMA. There was 9,691 ML of carryover available in the 2014/15 season. The volume that has been carried over into 2015/16 is 9,834 ML.

Groundwater levels

GMW, in conjunction with the Department of Environment, Land, Water and Planning, monitors groundwater levels in 123 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 have fallen by around 1.5 m between 2011 and 2014. Seasonal drawdown of around 13 m was observed in deep lead bore 138653 at Locks Lane in 2014/15 (Figure 4). This is typical for this area within the Moolort Zone where there is a concentration of groundwater pumping.

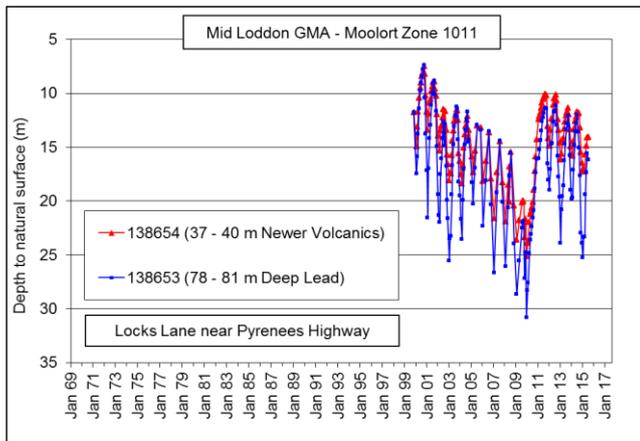


Figure 4. Hydrographs for nested bores in the Moolort Zone

In the Laanecoorie-Serpentine Zone groundwater recovery levels have fallen by around 1.4 m between 2011 and 2014. Seasonal drawdown of around 8.7 m was observed in deep lead bore 88214 on Rothackers Road in 2014/15, which is typical for this area (Figure 5).

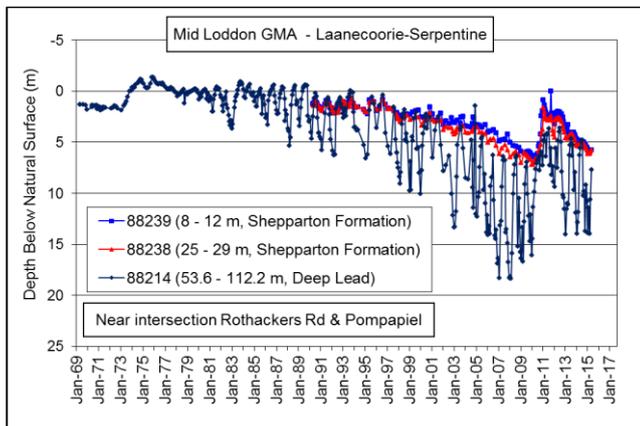


Figure 5. Hydrographs for nested bores in the Laanecoorie-Serpentine Zone

In the Jarklin Zone, groundwater recovery levels have fallen by around 1.7 m between 2011 and 2014 (Figure 6). Lower groundwater levels in this area can provide improved drainage and reduced waterlogging and land salinity problems.

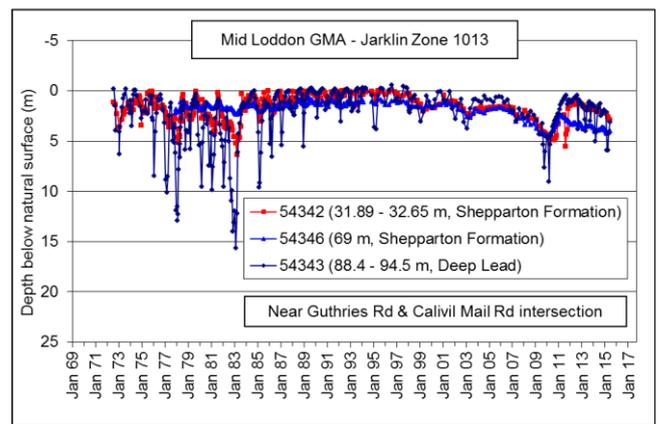


Figure 6. Hydrographs for nested bores in Jarklin Zone

Groundwater salinity

Groundwater salinity is recorded from key State observation bores in the north of the Mid-Loddon GMA. The results indicate that groundwater salinity remains within expected ranges (Figure 7).

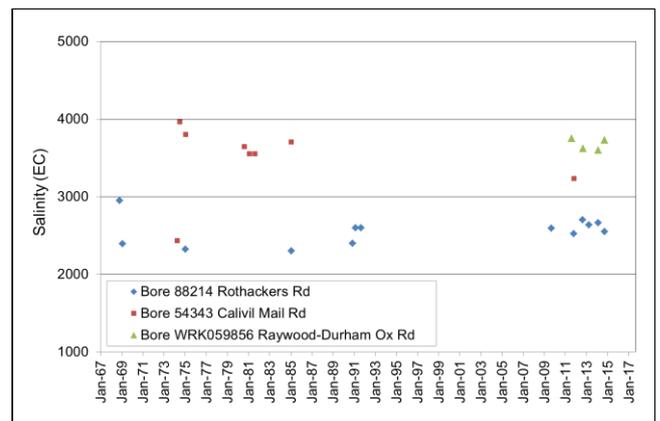


Figure 7. Groundwater salinity

GMW sent bottles to groundwater users to collect a sample for salinity analysis. Unfortunately only 23 (17%) of samples were returned. Results indicate that groundwater salinity levels are within expected ranges in each zone.

Groundwater users are encouraged to return samples for analysis when requested as trends over time provide valuable information to help support more informed groundwater management decisions.

Where can I get more information?

You can download a copy of the Mid-Loddon Groundwater Management Rules or Annual Report from the GMW website www.gmwater.com.au or call 1800 013 357.