Lower Ovens Groundwater Management Area

The Lower Ovens Groundwater Management Area (GMA) covers the Ovens River catchment downstream of Myrtleford. This includes the Buffalo and King Rivers and extends north along the floodplain to the Murray River.

Groundwater resources in the GMA are managed under a local management plan (the Plan) approved by Goulburn-Murray Water (GMW) in 2012.

Annual allocations

Groundwater levels in the Deep Lead of the GMA can be managed if required by restrictions on licensed take and use (or 'annual allocations').

Restrictions were not applied in 2022/23 as the three-year rolling averages (of groundwater recovery levels) were above the trigger levels – *refer Figures 1 and 2*.

The volume available for take in 2022/23 is 100 per cent of groundwater licence entitlement volume (licence volume) for all management zones (i.e., no restrictions).

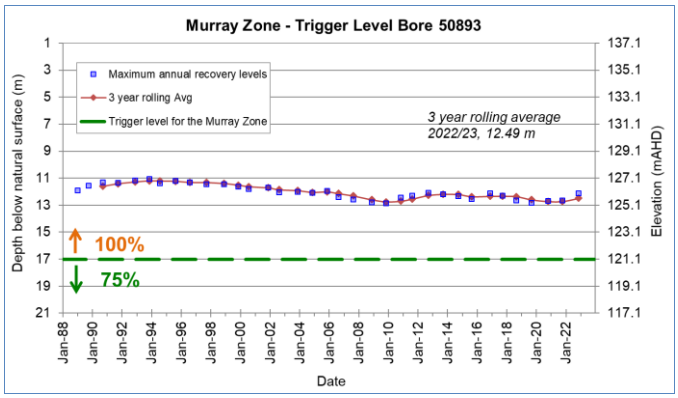

Figure 1. Trigger graph for Murray Zone restrictions

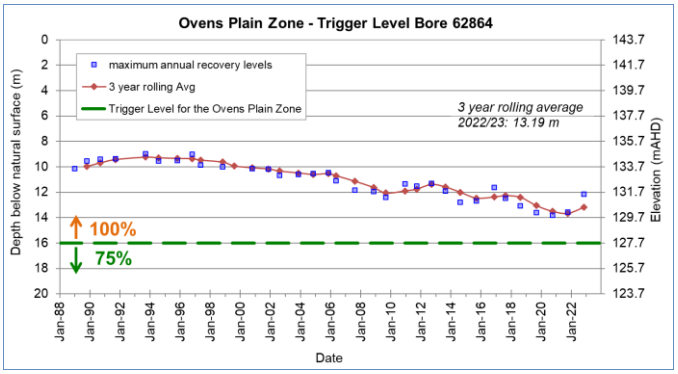

Figure 2. Trigger graph for Ovens Plain Zone restrictions

Groundwater licence volume and use

The total recorded use in the GMA was 3,464.7 ML, or 17 per cent of licence volume (Table 1, Figure 3). This use was three percentage points lower than recorded in 2021/22.

Table 1. Licence volume and use for 2022/23

Management zone	Licence volume (ML/yr)	Recorded use (ML)
Bedrock Zone	1,420.6	128.6
Mid Ovens Zone	10,314.8	896.2
Murray Zone	3,632.0	334.1
Ovens Plain Zone	4,507.6	2,105.8
Total	**19,875.0**	**3,464.7**

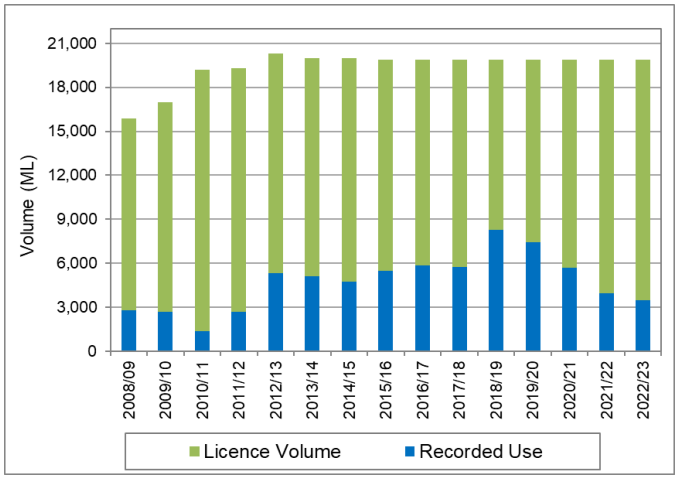

Figure 3. Annual recorded use as a proportion of licence volume

Licence transfers

Licence volume can be transferred between licences in the GMA, on a temporary or permanent basis.

In 2022/23, the volume of temporary transfers in the GMA totalled 374 ML (Table 2), with two transfers within the Mid Ovens zone and one within the Murray Zone. There was one 50 ML/yr permanent transfer within the Mid Ovens Zone for the year. (Table 3)

Table 2. Temporary transfers in 2022/23

Management zone	Licence volume transferred from (ML)	Licence volume transferred to (ML)
Ovens Plain Zone	-	-
Mid Ovens Zone	174	174
Bedrock Zone	-	-
Murray Zone	200	200
Total	**374**	**374**

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Table 3. Permanent transfers in 2022/23

Management zone	Licence volume transferred from (ML/yr)	Licence volume transferred to (ML/yr)
Ovens Plain Zone	-	-
Mid Ovens Zone	50	50
Bedrock Zone	-	-
Murray Zone	-	-
Total	**50**	**50**

Licence compliance

In 2022/23, there were no prosecutions or convictions relating to groundwater in the GMA. GMW has a zero-tolerance approach to unauthorised take of non-urban water. Relevant actions, if required, are taken in accordance with GMW's Risk-Based Compliance and Enforcement Framework. More information is available on the GMW website, at

www.gmwater.com.au/compliance

Groundwater levels

GMW and the Department of Energy, Environment and Climate Action monitor groundwater levels in 62 State observation bores within the GMA.

In the Murray Zone during 2022/23, the lowest groundwater levels recorded in the Deep Lead (Calivil Formation) at Brimin was 15.21 m depth below natural surface (DBNS). This was 0.14 m higher (i.e., closer to the surface) than the previous year. As of June 2023, groundwater levels at this location have recovered to 12.39 m DBNS (Figure 4).

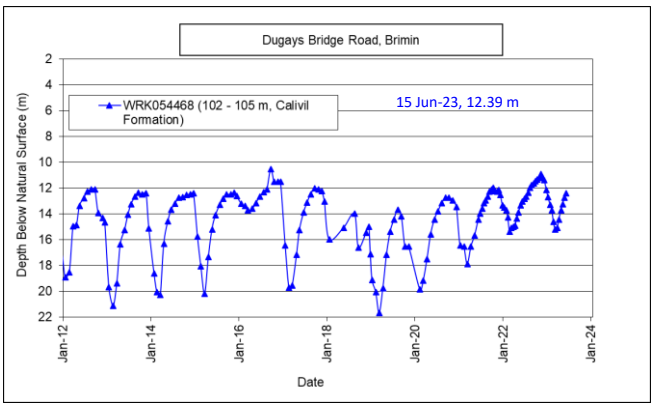

Figure 4. Groundwater level monitoring at Brimin

In the Ovens Plain Zone, groundwater levels in the Calivil Formation at Boorhaman dropped to 16.43 m DBNS in March 2023; and then recovered up to 11.24 m DBNS by mid-June 2023 (Figure 5).

In the Mid Ovens Zone, groundwater levels declined to 4.23 m DBNS in the Calivil Formation aquifer at Oxley during 2022/23 (Figure 6).

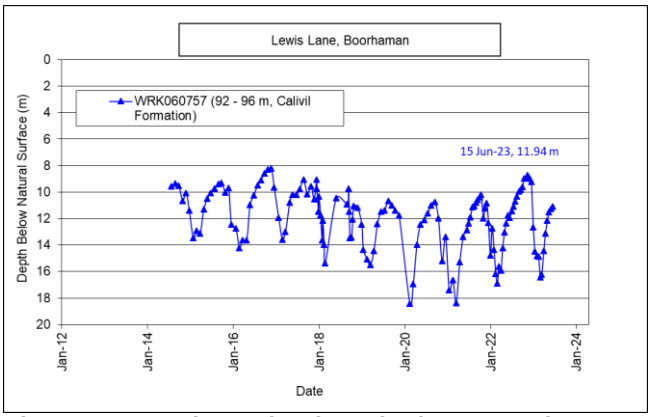

Figure 5. Groundwater level monitoring at Boorhaman

Groundwater levels in the shallow aquifer system (Shepparton Formation) bore at the same monitoring site (WRK053427) remained higher than the deeper bore throughout the year; and there was little variation in the levels (Figure 6).

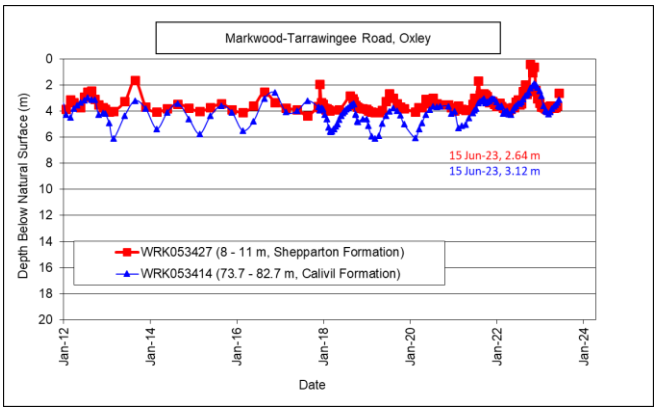

Figure 6. Groundwater level monitoring at Oxley

Groundwater quality

Groundwater salinity recorded for key State observation bores in the GMA have not shown any trends from previous values measured (Figure 7).

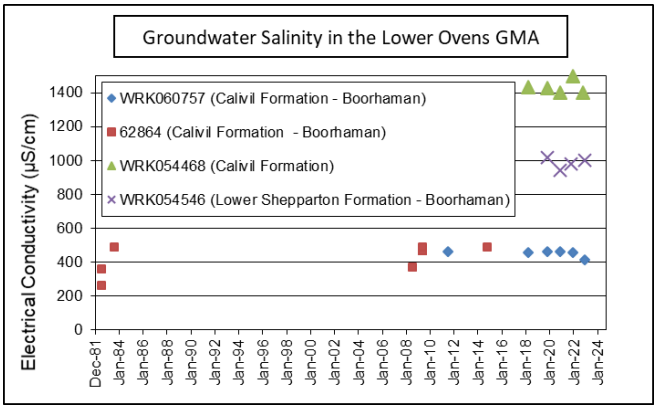

Figure 7. Groundwater salinity monitoring

Where can I get more information?

The Lower Ovens GMA Local Management Plan is available at www.gmwater.com.au, or phone GMW on 1800 013 357.

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