

2023 ANNUAL NEWSLETTER

Lower Campaspe Valley Water Supply Protection Area

Groundwater management

The Lower Campaspe Valley Water Supply Protection Area (WSPA) extends from Lake Eppalock in the south to the Murray River in the north. Groundwater resources are managed by Goulburn-Murray Water (GMW) in accordance with the *Lower Campaspe Valley WSPA Groundwater Management Plan*, approved by the Minister for Water in 2012 (the Plan).

Groundwater licence volume and use

On 30 June 2023, the total licence volume in the WSPA was 55,860.4 ML/yr. For the 2022/23 season, recorded use in the WSPA was 10,817.1 ML, or 19 per cent of licence volume (Figure 1).

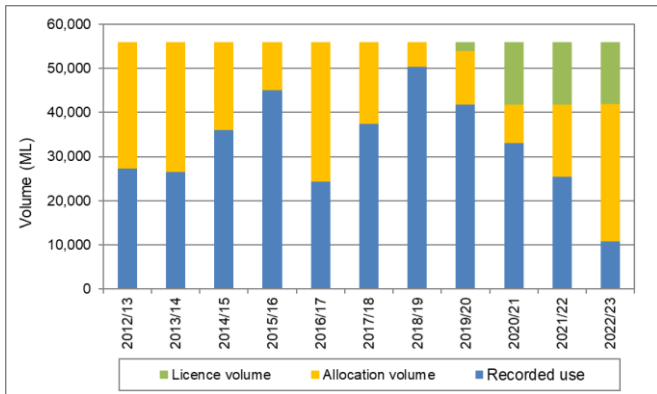


Figure 1. Licence volume, allocation and use

Carryover

A total of 12,725.7 ML was carried over by licence holders in the WSPA for use in the 2022/23 water year. The volume that has been carried over into the 2023/24 water year is 13,764.4 ML.

Annual allocations

Allocations are determined by comparing the three-year rolling average of the maximum groundwater recovery levels to triggers set by the Plan.

In the 2022/23 water year, all management zones had an allocation of 75 per cent of groundwater licence entitlement volume (licence volume).

Allocations have been announced at 100 per cent for the 2023/24 year, as the three-year rolling average was above the 100 per cent trigger level for the northern (Figure 1) and below the 75 per cent for the southern (Figure 2) trigger bores. Given the requirements of the Plan:

- A 100% allocation will apply to all groundwater licences in the Elmore-Rochester Zone (1031), Bamawm Zone (1032) and Echuca Zone (1033)

- A 75% allocation will apply to all groundwater licences in the Barnardown Zone (1034).

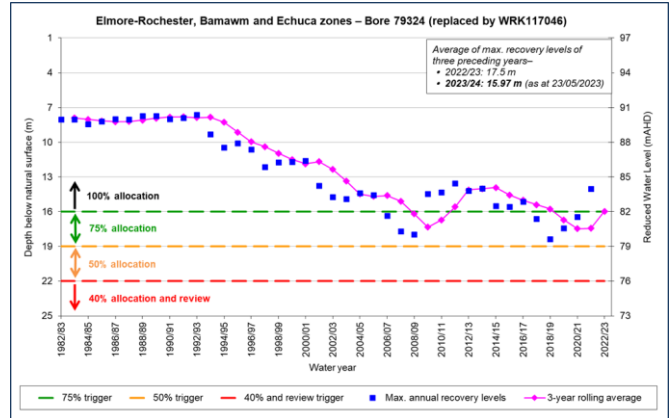


Figure 2. Allocation trigger graph for the northern zones

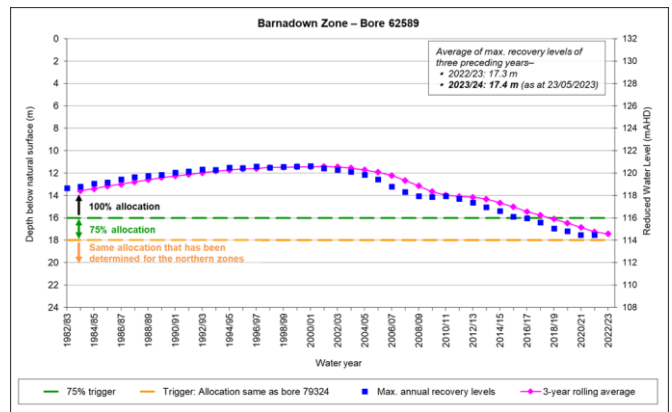


Figure 3. Barnardown Zone allocation trigger graph

Licence transfers

In 2022/23 there were 5 temporary transfers for a total of 928 ML and one permanent transfers for a total of 100.0 ML/yr (Figure 4).

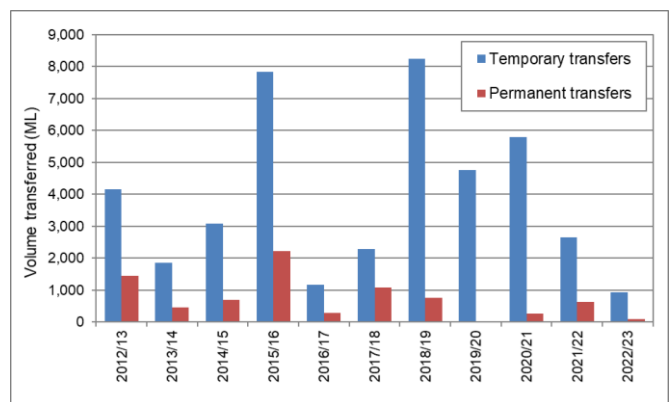


Figure 4. Groundwater trading activity

Licence compliance

In 2022/23, there were no reported instances of alleged unauthorised take of groundwater (incl. overuse) in the WSPA.

Licence holders are reminded not to extract more than their licensed volume without approval from GMW.

GMW has a zero-tolerance approach to unauthorised take of non-urban water. GMW will investigate all incidents and take action as necessary, 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

The Department of Energy, Environment, Climate Action (DEECA), in partnership with GMW, monitor 101 State observation bores in the WSPA.

Monitoring indicates that groundwater levels across much of the WSPA in 2022/23 were slightly higher than the 2021/22 water year.

The maximum seasonal recovery level in Deep Lead observation bore (60134), located near Rochester in the Elmore-Rochester Zone were slightly higher in 2022/23 than the maximum level in 2021/22 and seasonal drawdown slightly less. This is a consistent pattern across bores in this area (Figure 5).

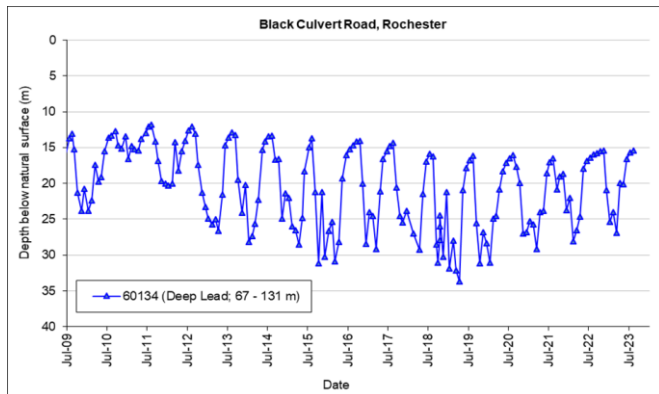


Figure 5. Groundwater level monitoring at Rochester

At Strathallan, in the Bamawm Zone levels recorded in Deep Lead bore 47247 indicated that the maximum recovery level was 3.93 m higher during 2022/23 than the previous year (Figure 6).

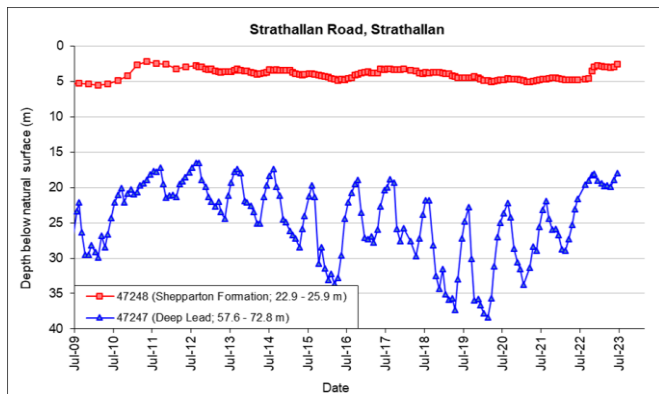


Figure 6. Groundwater level monitoring at Strathallan

In the Echuca Zone, groundwater recovery levels increased in 2022/23. There was no notable seasonal drawdown in 2022/23 which is consistent with low irrigation water use during this period (Figure 7).

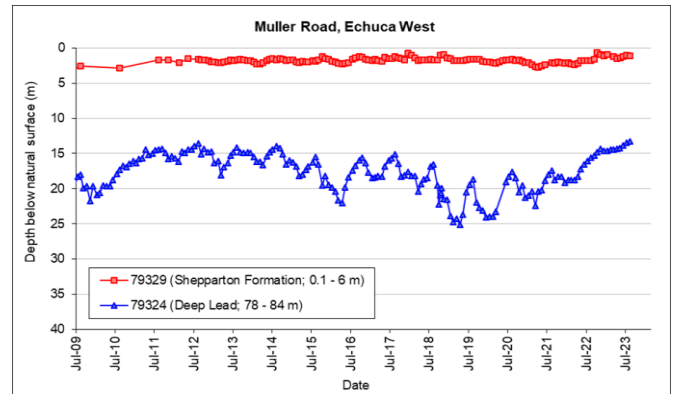


Figure 7. Groundwater level monitoring at Echuca West

In the Barnadown Zone, where less seasonal variation in groundwater levels is typical, the rate of groundwater-level decline eased in 2020/21 (Figure 8).

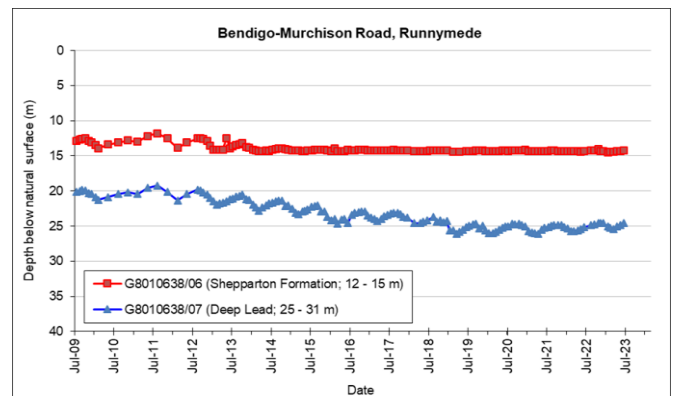


Figure 8. Groundwater level monitoring at Runnymede

Groundwater quality

Samples were collected from 11 State observation bores in 2021/22. Results showed that salinity in the Deep Lead ranged from 1,100 µS/cm (EC), south of Elmore, to 11,000 EC on the north-western margin of the WSPA, which is comparable to recent years.

Each year, GMW provides sample bottles to all licensed groundwater users in the WSPA, to monitor changes in groundwater salinity. Of the 167 bottles sent out in 2022/23, GMW received 21 samples.

Where can I get more information?

You can download a copy of the Plan, the 2022/23 annual report and previous publications at www.gmwater.com.au or call GMW on 1800 013 357.