

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 in accordance with the Lower Campaspe Valley WSPA Groundwater Management Plan, which was approved by the Minister for Water in October 2012.

Allocations

Allocations are determined by comparing the three year rolling average of the maximum groundwater recovery level to the trigger level.

In 2017/18 all management zones received an allocation of 100%. Allocations in 2018/19 are also 100% (Figure 1 and Figure 2).

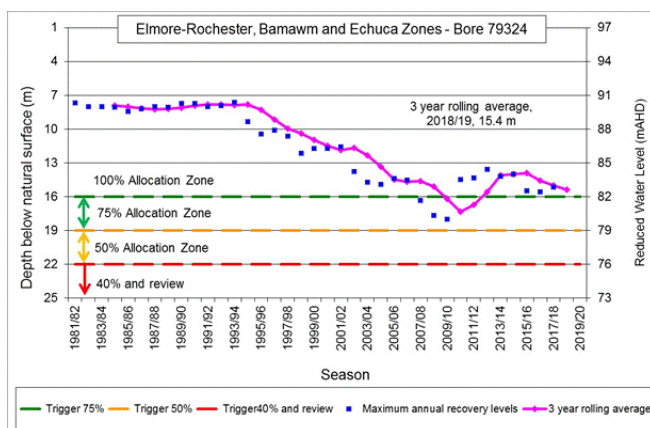


Figure 1 Trigger levels for allocations in the Elmore-Rochester, Bamawm and Echuca Zones

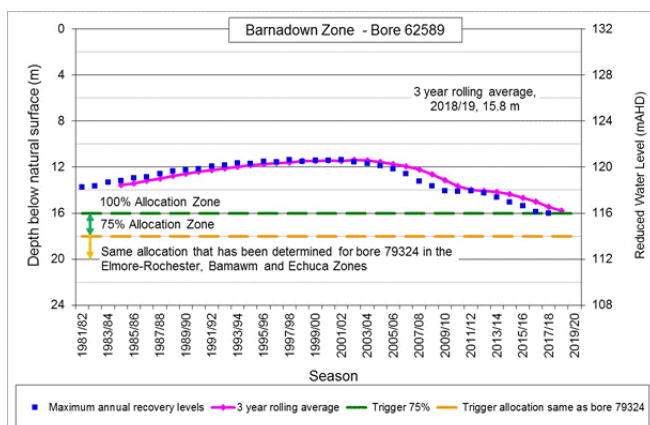


Figure 2 Trigger levels for allocations in the Barnadown Zone

Groundwater use

Metered groundwater use in the Lower Campaspe Valley WSPA in 2017/18 was 37,409 ML, which is 67% of licence entitlement (Figure 3).

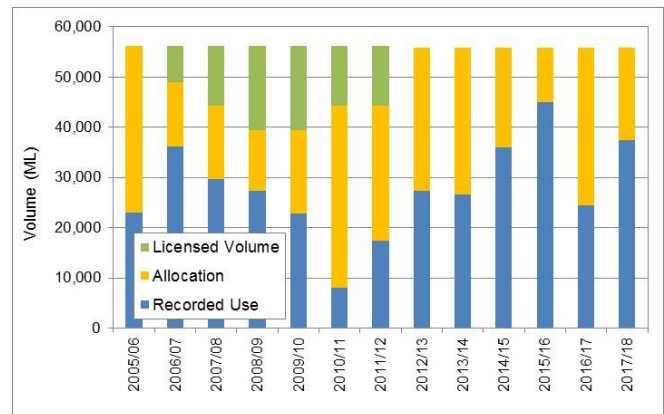


Figure 3 Recorded groundwater use

Trading

The Plan allows groundwater licence holders to temporarily or permanently transfer licence entitlement. In 2017/18 there were 14 temporary transfers for a total of 2,292 ML and eight permanent transfers for a total of 1,080.5 ML/yr (Figure 4).

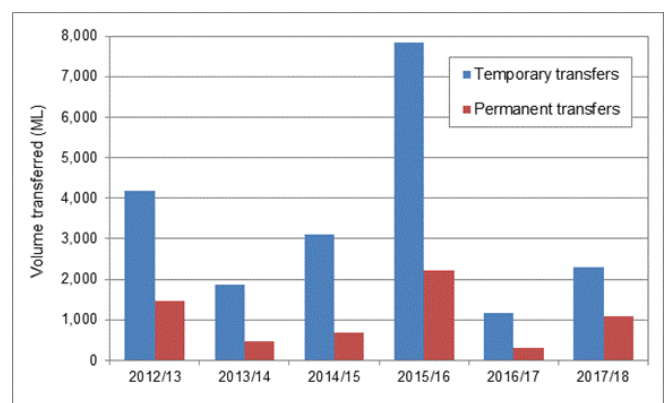


Figure 4 Groundwater trading activity

Licence holders are reminded not to extract more than their licence volume without written approval from Goulburn-Murray Water.

Licence holders seeking to trade groundwater entitlement are encouraged to visit Watermatch, an on-line trading forum where people can advertise at www.watermatch.com.au/

Carryover

There was 13,777 ML of carryover available to licence holders in the 2017/18 season.

The volume that has been carried over into the 2018/19 season is 12,840 ML.

Groundwater levels

The Department of Environment, Land, Water and Planning (DELWP) in partnership with Goulburn-Murray Water monitored 90 State observation bores in the Lower Campaspe Valley WSPA.

Monitoring indicates that seasonal groundwater level recovery is within observed historical ranges, although over the period of Plan implementation there has been a falling trend which may be attributed to reduced rainfall recharge and greater groundwater pumping. If the trend continues, restrictions may be imposed in 2019/20.

In the Elmore-Rochester and Bamawm Zones, groundwater seasonal drawdown of almost 16 m was observed in intensively pumped areas in 2017/18 (Figure 5 and Figure 6).

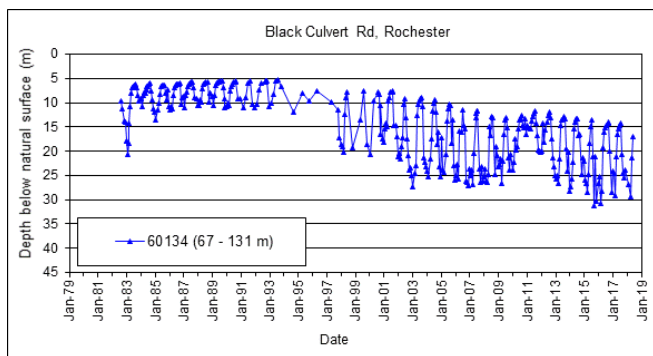


Figure 5 Groundwater levels in Elmore-Rochester Zone

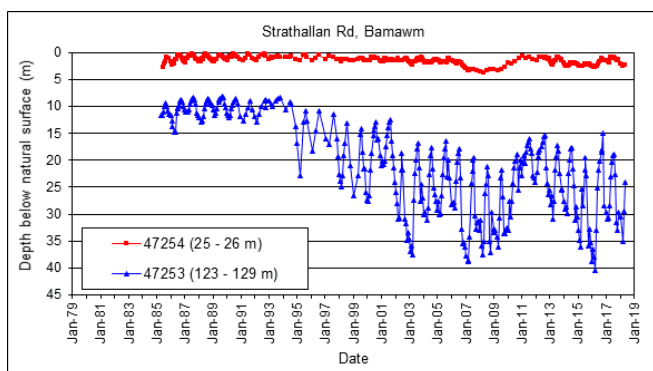


Figure 6 Groundwater levels in Bamawm Zone

In comparison, seasonal drawdown in the Echuca and Barnadown Zones is typically less than 5 m (Figure 7 and 8).

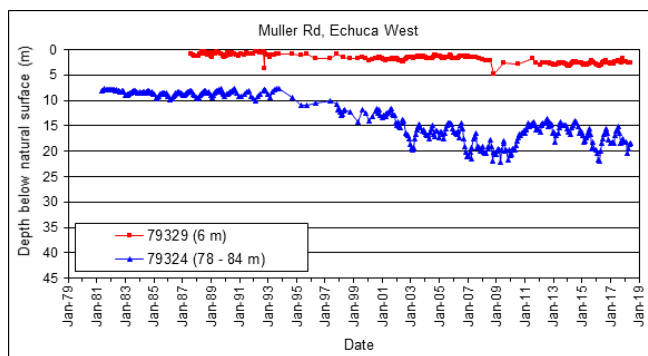


Figure 7 Groundwater levels in Echuca Zone

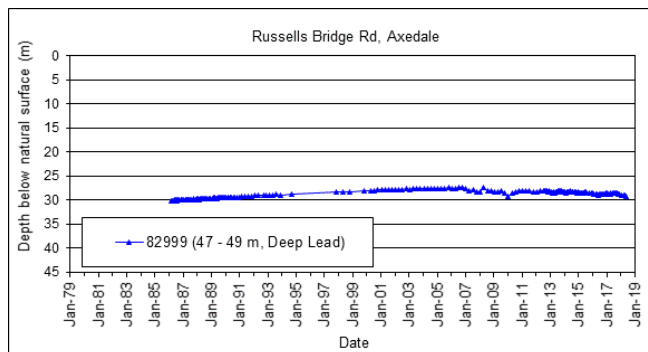


Figure 8 Groundwater levels in Barnadown Zone

Groundwater quality

Each year, Goulburn-Murray Water provides sample bottles to all licensed groundwater users to monitor salinity in their bores. Only 24% of bottles were returned. This was supported by results from targeted sampling of licensed bores and indicates that salinity levels are generally within expected ranges.

Groundwater samples were also collected from key nested State observation bores. Groundwater salinity ranged between 460 EC near Elmore to 10,000 EC on the north-western margin of the area, which is comparable to recent years. Continued monitoring of groundwater quality will enable any trends to be identified.

Where can I get more information?

You can download a copy of the Lower Campaspe Valley WSPA Groundwater Management Plan or the annual report from the GMW website www.gmwater.com.au, or call 1800 013 357.