

Loddon Highlands Water Supply Protection Area

Groundwater management

The Loddon Highlands Water Supply Protection Area (WSPA) extends from Newlyn, Learmonth and Waubra in the south to Maryborough and Dunolly in the north. Groundwater resources are managed under the Loddon Highlands WSPA Groundwater Management Plan (the Plan) which was approved by the Minister for Water in November 2012.

The Plan provides protection to existing licence holders and the environment through caps on licence entitlement and restrictions on the take of groundwater when triggers are reached. It also provides licence holders with flexibility to manage their entitlements through trading and carryover.

Allocations

Under the Plan, trigger levels have been established for the Ascot, Blampied, Newlyn and Waubra management zones where there is a higher density of licence volume, and seasonal groundwater level

drawdown is greatest.

In 2017/18 all management zones had an allocation of 100% except for the Newlyn Zone which had an allocation of 75%.

Allocations have been announced for the 2018/19 water year based on the August 2018 groundwater levels. All management zones have an 100% allocation with the exception of the Newlyn and Blampied zones which start with a 75% allocation (Figure 1).

Groundwater levels will continue to be monitored during spring and if there is sufficient recovery to November, allocations may be increased in the Newlyn and Blampied zones.

Carryover

There was 2,936 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 2,930 ML.

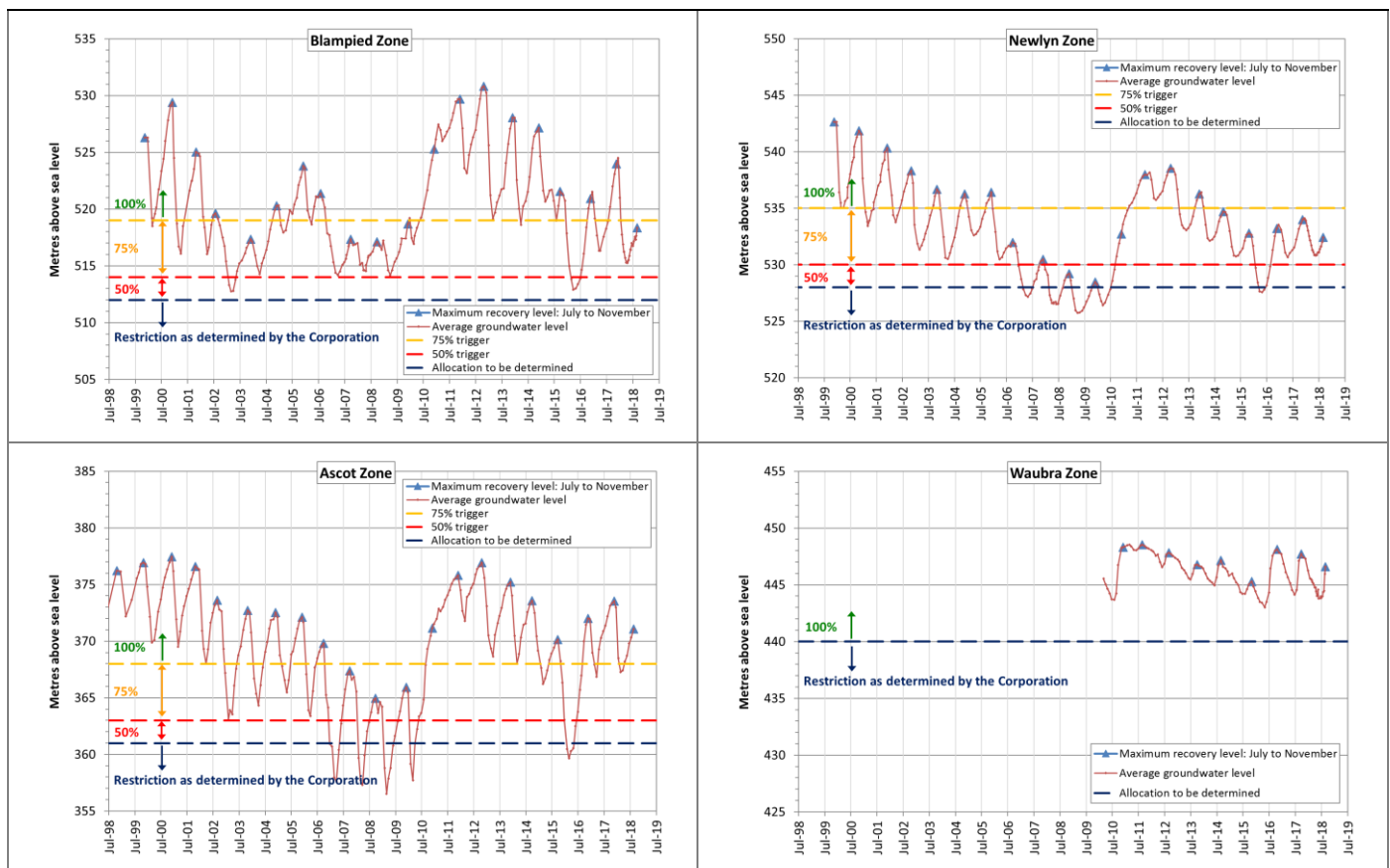


Figure 1 Average maximum groundwater recovery levels to August 2018 compared to trigger levels

August 2018; #A3334087

Groundwater use

Recorded use in the Loddon Highlands WSPA was 7,215 ML in 2017/18, which is 35% of the total licensed volume (Figure 2). In the Newlyn Zone, where an allocation of 75% was set, recorded use was 33% of licensed volume (1,060 ML).

Recorded use was greatest in the Ascot Zone at 3,166 ML. The Blampied Zone recorded the greatest use as a percentage of licensed volume at 65%.

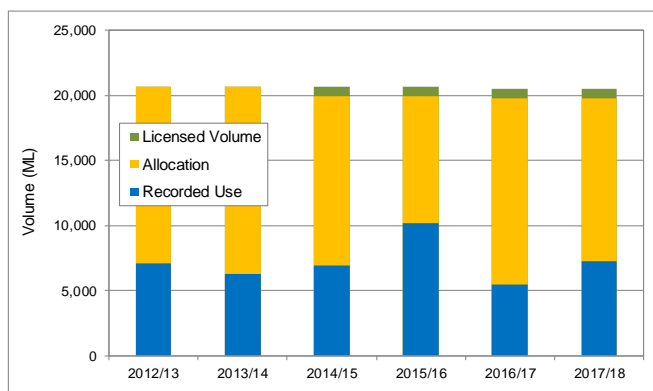


Figure 2 Recorded groundwater extractions

Groundwater trading

In 2017/18 there were eight temporary transfers for a total of 302 ML and five permanent transfers for a total of 24 ML/yr (Figure 3). Most transfers were within the same management zone. There were two permanent transfers between zones: 5 ML/yr from the Waubra Zone to the Talbot Zone; and 1 ML/yr from the Ascot Zone to the Ullina Zone.

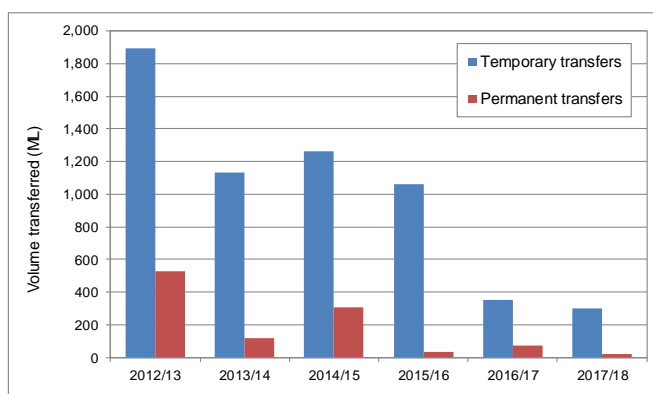


Figure 3 Groundwater trade activity

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

Licence holders seeking to trade groundwater licence volume should visit *Watermatch*, an on-line trading forum where people can advertise at www.watermatch.com.au

Groundwater levels

GMW, in conjunction with the Department of Environment, Land, Water and Planning, monitor groundwater levels in 59 State observation bores across the Loddon Highlands WSPA.

Seasonal drawdown during 2017/18 was typically less than 10 m, but larger drawdowns were observed in the Ascot Zone with 12.5 m of drawdown recorded in bore 64880 (Figure 4). Groundwater recovery levels have declined since 2010/11, however they are currently within historical ranges.

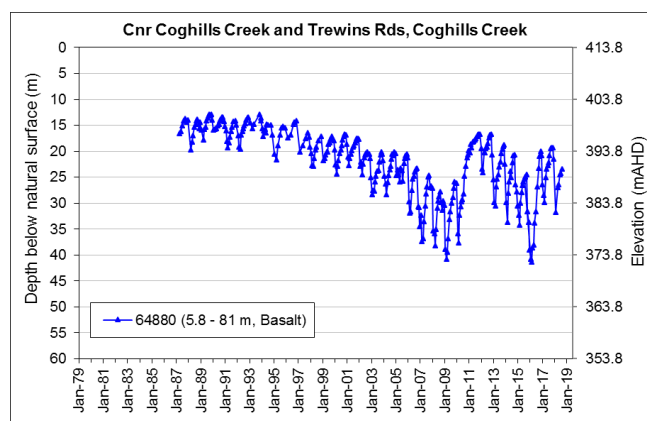


Figure 4 Groundwater levels in the Ascot Zone

Groundwater quality

Groundwater quality is monitored in nested State observation bores located near Campbelltown in the Ullina Zone, and Bung Bong in the Talbot Zone. Results from samples collected in January 2018 indicate that groundwater salinity in the shallow Basalt aquifer is more saline than in the Deep Lead aquifer at these sites, which is consistent with previous results (Figure 5).

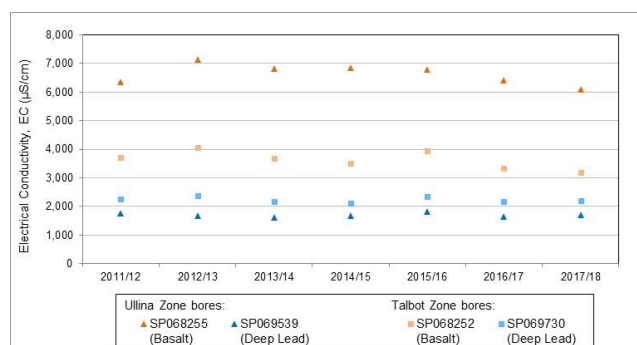


Figure 5 Groundwater salinity in key nested bores

Where can I get more information?

You can download a copy of the Loddon Highlands WSPA Groundwater Management Plan or the 2017/18 annual report from the GMW website www.gmwater.com.au or call 1800 013 357.