

Loddon Highlands Water Supply Protection Area

Groundwater management

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

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

Annual 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 entitlement volume, and seasonal groundwater-level drawdown is greatest.

In the 2020/21 water year, all management zones had an allocation of 100 per cent of licence entitlement volume, except for the Newlyn Zone where a 75 per cent allocation was set.

Allocations have now been announced for the 2021/22 year based on the highest groundwater levels to 31 August 2021. The allocations for each management zone are now the same as those in 2020/21 (Figure 1).

Groundwater levels will be monitored throughout the year; if there is sufficient recovery in the Newlyn Zone trigger bores by 30 November, allocations may be increased for that zone.

Carryover

There was a total of 2,996.9 ML carried over by licence holders in the WSPA for use in the 2020/21 water year. A total of 3,039.2 ML was then carried over for use in the 2021/22 water year.

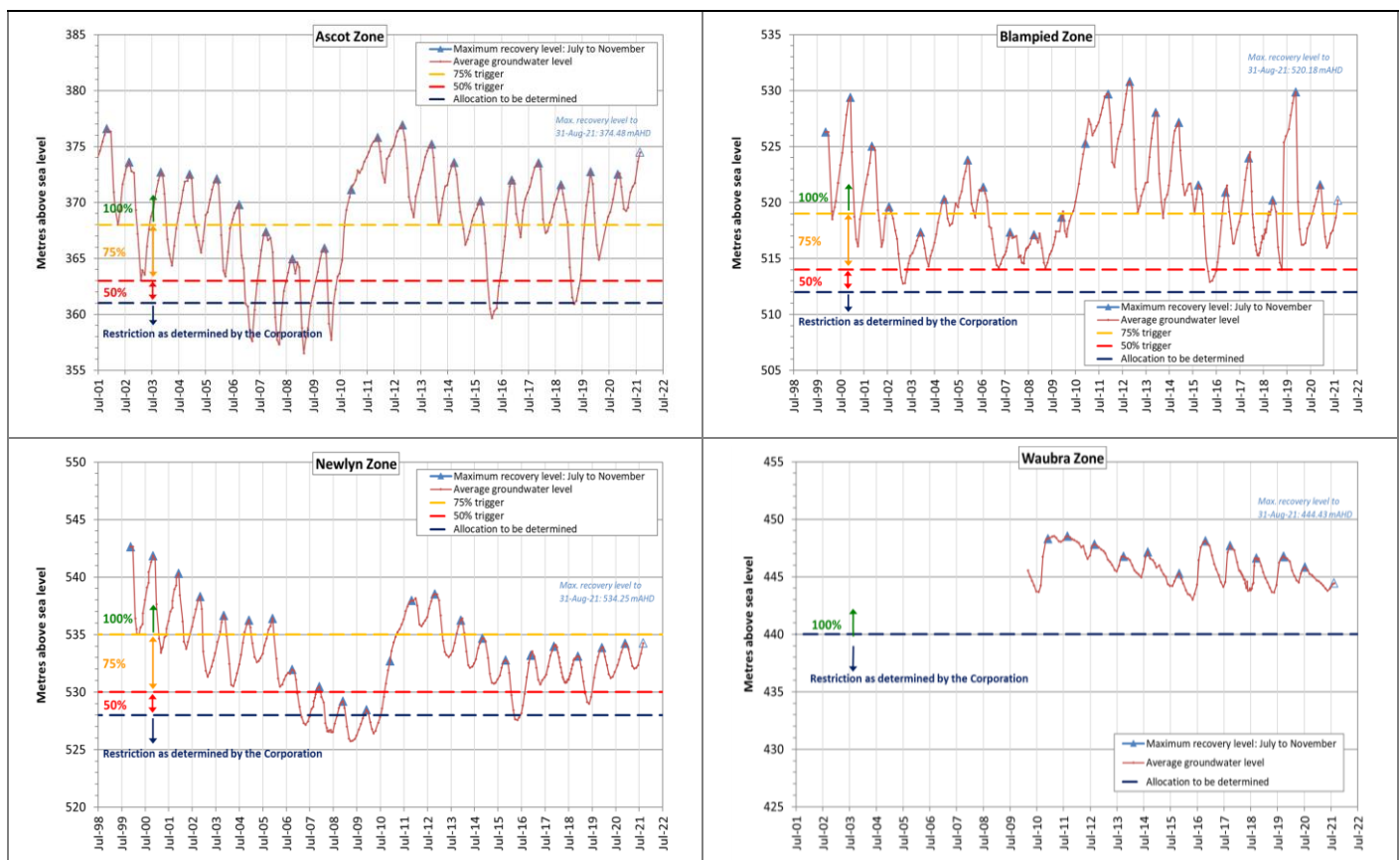


Figure 1. Average maximum groundwater recovery levels to 31 August 2021, compared to trigger levels

Groundwater use

Total recorded use in the WSPA was 4,608.7 ML in 2020/21, which equates to 22 per cent of the total licence entitlement volume (Figure 2). In the Newlyn Zone, where an allocation of 75 per cent was set, recorded use was 24 per cent of licence entitlement volume (or 715.1 ML).

Recorded use was greatest (by volume) in the Ascot Zone, at 2,062.6 ML. Blampied Zone recorded the greatest use as a percentage of licence entitlement volume, at 38 per cent.

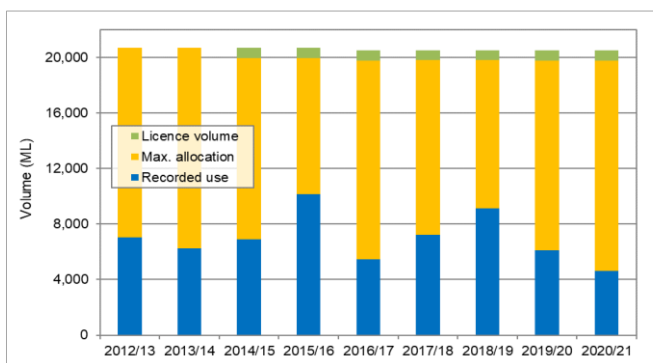


Figure 2. Recorded groundwater extractions

Licence transfers

During the 2020/21 water year there were eight temporary transfers for a total of 331 ML, and two permanent transfers for a total of 40 megalitres per year (ML/yr) (Figure 3).

While the majority of transfers occurred between licence holders within the same management zones, there were four transfers between zones; three temporary and one permanent (10 ML/yr from Ascot to Ullina).

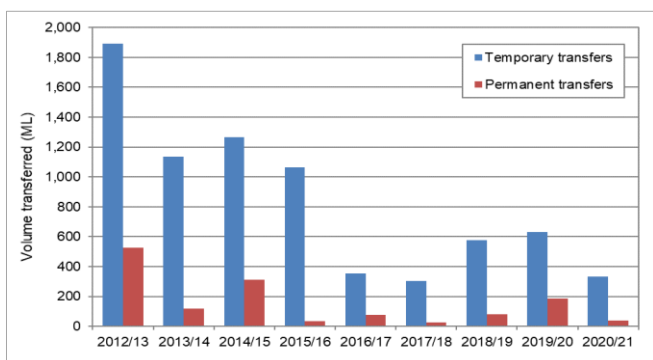


Figure 3. Licence volume transfer activity

Licence compliance

In 2020/21 there were four reported instances of alleged unauthorised take of groundwater (incl. overuse) in the WSPA.

GMW has a zero-tolerance approach to unauthorised take of non-urban water. GMW will investigate these 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

Reminder to licence holders:
You should not extract more than your allocated volume without written approval from GMW.

Groundwater levels

GMW, in conjunction with the Department of Environment, Land, Water and Planning (DELWP), monitors groundwater levels in 51 state observation bores, located across the WSPA.

Seasonal drawdown during 2020/21 was typically less than 6 m, however larger drawdowns were observed in the Ascot Zone: e.g. drawdown up to 7.34 m was recorded in bore 64880 at Coghills Creek (Figure 4).

In general, seasonal recovery levels (i.e. the max. level that groundwater recovers to in winter/ spring each year) throughout the WSPA have been lower than in 2012; however, they continue to remain within historic ranges.

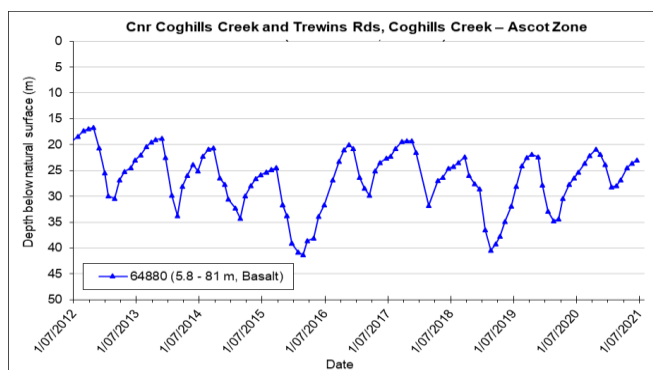


Figure 4. Groundwater level monitoring at Coghills Creek, since July 2012

Groundwater quality

Groundwater quality is monitored in state observation bores located near Campbelltown in the Ullina Zone, and Bung Bong in the Talbot Zone. Results from samples collected in October 2020 indicate that there has been little variation in groundwater salinity over the last four year (Figure 5).

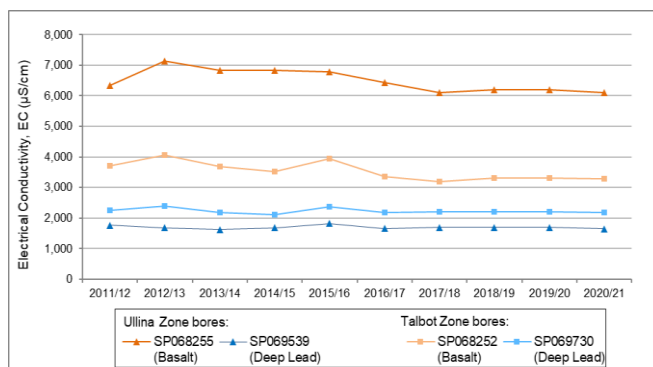


Figure 5. Groundwater salinity in key nested bores

Where can I get more information?

You can download a copy of the Plan, the 2020/21 annual report and other resources from the website, at www.gmwater.com.au/loddonhighlandswspa