

2022 ANNUAL NEWSLETTER

Loddon Highlands Water Supply Protection Area

Groundwater management

The Loddon Highlands Water Supply Protection Area (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 groundwater users 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 entitlement 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 2021/22 water year, all management zones had an allocation of 100 per cent of licence entitlement volume, including Newlyn Zone for the first time since 2013/14 (Figure 1).

Allocations for the 2022/23 water year were announced on 8 August 2022, based on the highest groundwater levels recorded between in July 2022 (Figure 1).

- In Newlyn Zone, groundwater take and use is limited to 75per cent of licence entitlement volume. GMW will continue to monitor groundwater levels in the trigger bores and announce a higher allocation if there is sufficient recovery by 30 November 2022.
- Licence holders in all other management zones in the WSPA can access 100per cent of licence volume.

Carryover

There was a total of 3,039.2 megalitres (ML) carried over by licence holders in the WSPA for use in the 2021/22 water year. A total of 3,028.7 ML was then carried over for use in the 2022/23 water year.



Figure 1. Allocation trigger graphs for each of the four management zones where annual allocations are determined. Note, 2022/23 levels in the trigger graphs above are based on groundwater level records to 30 August 2022.

Groundwater use

Total recorded use in the WSPA was 5,040.8 ML, in the 2021/22 water year. This equates to 25 per cent of the total licence entitlement volume (Figure 2).

Recorded use was greatest (by volume) in Ascot Zone, at 2,318.3 ML. Blampied Zone recorded the greatest use as a percentage of licence entitlement, at 45per cent.

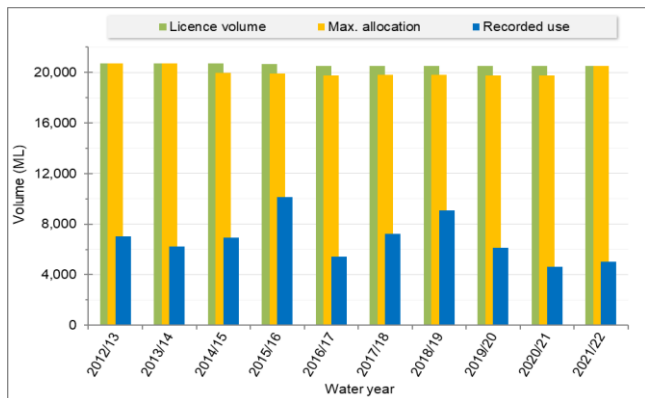


Figure 2. Annual recorded use volumes compared to licence entitlement and maximum allocation volumes

Licence transfers

During the 2021/22 water year three permanent transfers were completed, totalling 37 ML per year (ML/yr), and six temporary transfers, totalling 213 ML/yr. This is the lowest number and volume of temporary transfers to occur in a water year since the Plan was implemented (Figure 3).

The majority of temporary transfers occurred between licences within the same management zones; conversely, all permanent transfers were between licences in different management zones.

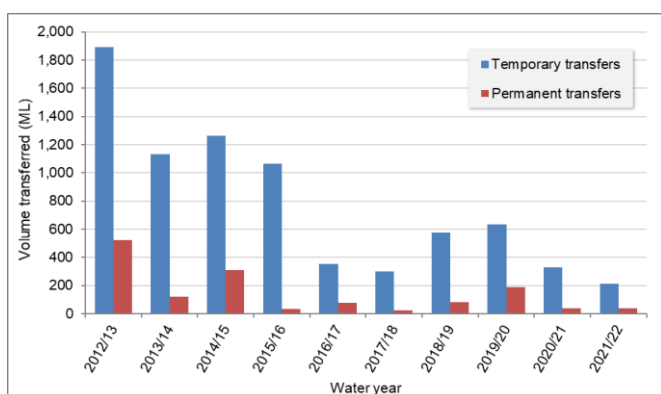


Figure 3. Licence volumes transferred within the WSPA, each water year since 2012/13

Licence compliance

In 2021/22 there were no reports of alleged, unauthorised take of groundwater, and no prosecutions or convictions relating to groundwater matters in the WSPA.

GMW is responsible for ensuring water users in northern Victoria comply with their licence conditions. More information is available at www.gmwater.com.au/compliance

Groundwater levels

During the 2021/22 water year, groundwater level monitoring occurred at 59 State observation bores, located across the WSPA. Of these, 44 were monitored remotely using telemetry equipment capable of recording measurements hourly.

Drawdown during 2021/22 was typically less than six metres (m), however larger drawdowns were observed in Ascot Zone – for example, up to 7.25 m was recorded in bore 64880 at Coghills Creek (Figure 4).

For the majority of bores, recovery levels (i.e., the highest level that groundwater rises to each year) throughout the WSPA have been lower than in 2012/13; however, they continue to remain within historic ranges.

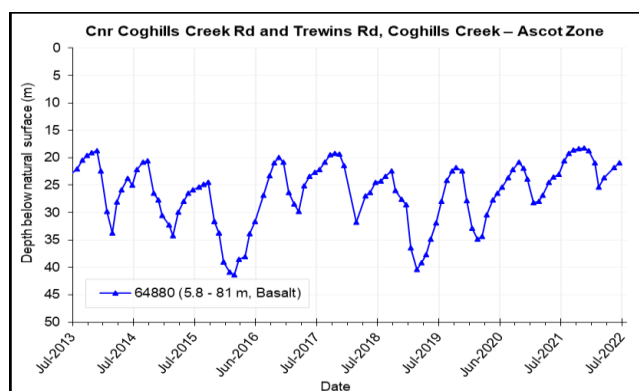


Figure 4. Groundwater level monitoring within the basalt aquifer at Coghills Creek, 1 July 2013 to 30 June 2022

Groundwater quality

Groundwater quality is monitored annually in State observation bores located near Campbelltown, in Ullina Zone, and Bung Bong, in Talbot Zone.

Results from samples collected in October/November 2021 indicate that groundwater salinity has remained relatively stable over the last five years (Figure 5).

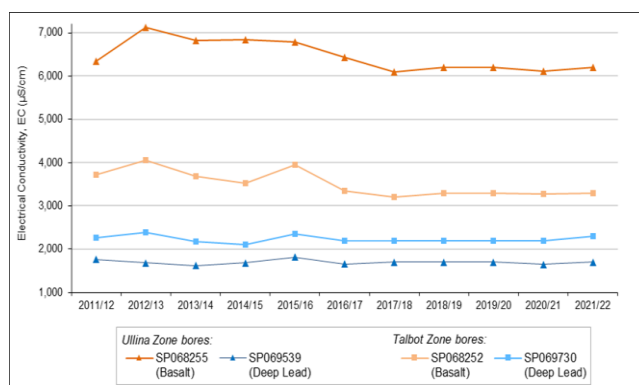


Figure 5. Groundwater salinity records for nested bores at two key monitoring sites in the WSPA

Where can I get more information?

You can download a copy of the Plan, the 2021/22 annual report and other resources from the website, at www.gmwater.com.au/loddonhighlandswspa