

Loddon Highlands WSPA

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 taking 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 Blampied, Newlyn, Ascot and Waubra management zones where the largest volume of

licence entitlement is concentrated and seasonal drawdown is greatest.

In 2015/16 all management zones received an allocation of 100% except for the Newlyn Zone which had an allocation of 75%.

Based on the August 2016 groundwater readings, allocations have been announced for the 2016/17 season with both the Blampied and Ascot Zones on 75%, the Newlyn Zone on 50% and the Waubra Zone on 100% allocations (Figure 1).

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

Carryover

There was 2,525 ML of carryover available to licence holders in the 2015/16 season. The volume that has been carried over into the 2016/17 season is 2,789 ML.

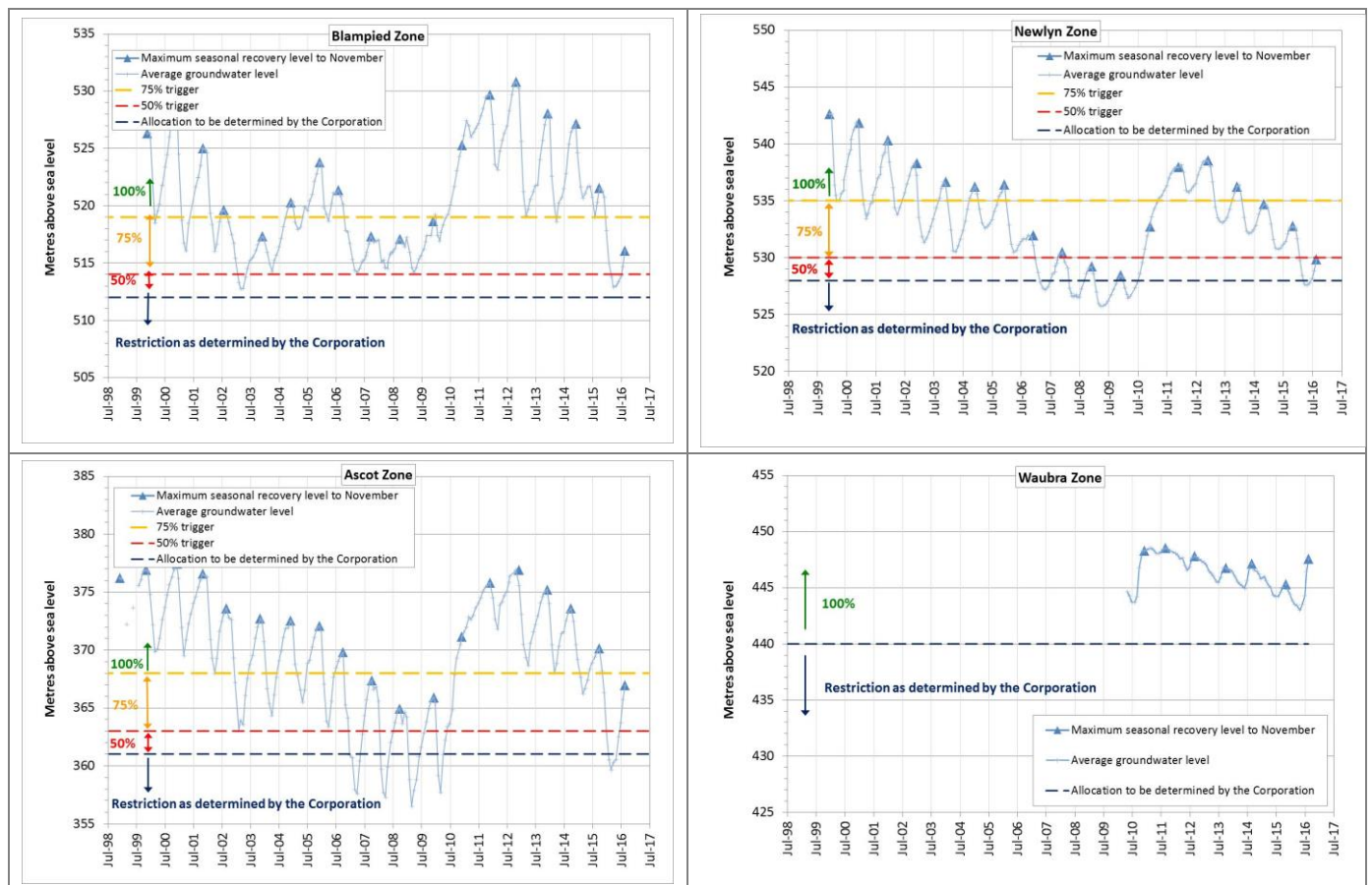


Figure 1 Average maximum groundwater recovery levels to August 2016 compared to trigger levels.

Note groundwater levels are still recovering and allocations for 2016/17 will be reviewed based on the recovery levels to November 2016.

Groundwater use

Metered use in the Loddon Highlands WSPA was 10,148.3 ML in 2015/16, which is 49% of licence volume (Figure 2). In the Newlyn Zone, which had an allocation of 75%, only 44% (1,321.9 ML) of licence volume was used. Metered use was greatest in the Ascot Zone (4,513.7 ML). Use as a percentage of licence volume was greatest in the Blampied Zone at (77%).

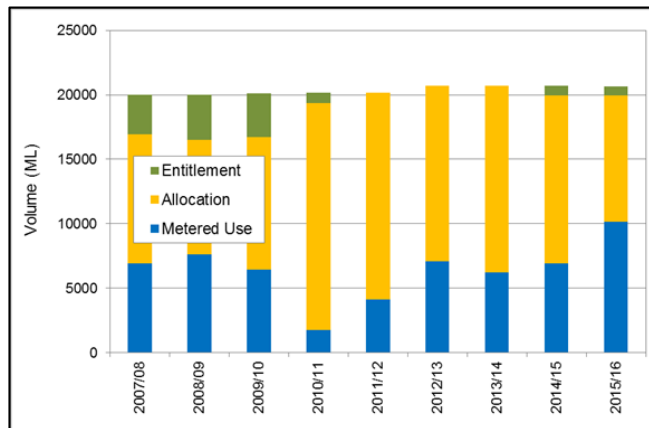


Figure 2 Metered groundwater extractions

Trading

There were 26 temporary transfers for a total of 1,063 ML in 2015/16 (Figure 3). There were 2 permanent transfers for a total of 35 ML, with both occurring within the Ullina Zone.

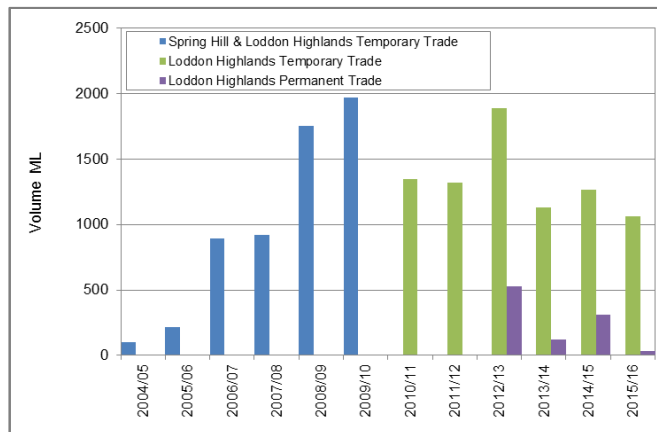


Figure 3 Groundwater trading activity

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

Licence holders that want to trade groundwater should visit Watermatch, an on-line forum where people can advertise at <https://www.watermatch.com.au/>

Groundwater levels

Goulburn-Murray Water (GMW), in conjunction with the Department of Environment, Land, Water and Planning monitor groundwater levels in 73 state

observation bores across the Loddon Highlands WSPA. Seasonal drawdown was typically less than 10 m, but larger drawdowns were recorded in the Ascot Zone with 16.8 m recorded at bore 64880 (Figure 4). The drawdowns were close to, and some cases exceeded, the highest seasonal drawdown levels observed.

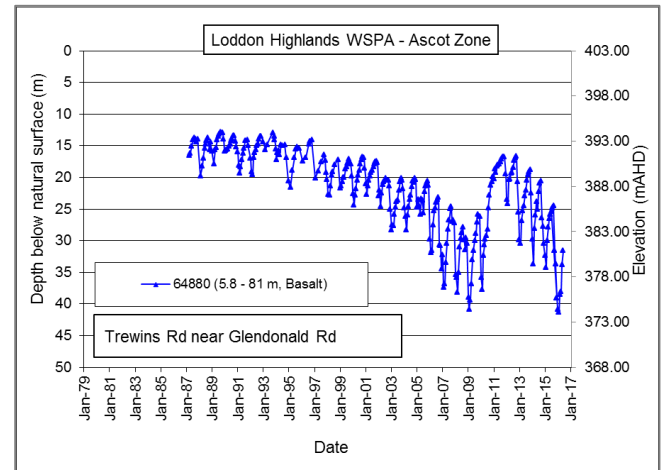


Figure 4 Groundwater levels in Ascot

Groundwater recovery levels have been declining since the wet conditions experienced in 2010/11, largely in response to reduced rainfall recharge. The decline in recovery levels is generally less than 5 m, but larger falls are seen in areas of intensive extraction in Blampied, Newlyn and Ascot. Despite these declines, groundwater levels are mostly within the historical range.

Groundwater quality

Groundwater quality is monitored in nested bores sites near Bung Bong and Moolort to identify any change in groundwater quality. Groundwater salinity in the shallow basalt aquifer in these locations is more saline than in the Deep Lead aquifer (Table 1).

Table 1: Groundwater salinity in key monitoring bores

Bore number	Zone	Aquifer Screened	Salinity (EC μ S/cm)
SP069539	Ullina	Deep Lead	1,820
SP068255	Ullina	Basalt	6,790
SP069730	Talbot	Deep Lead	2,360
SP068252	Talbot	Basalt	3,950

Where can I get more information?

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