

# Annual Newsletter

September 2015



## 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 2014/15 all management zones received an allocation of 100% except for the Newlyn Zone which had an allocation of 75%.

Based on the August 2015 groundwater levels, a 100% allocation has been announced for the 2015/16 season for all zones except the Newlyn Zone, which has an allocation of 75% (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 Newlyn Zone.

### Carryover

There was 2,769 ML of carryover available to licence holders in the 2014/15 season. The volume that has been carried over into the 2015/16 season is 2,736 ML.

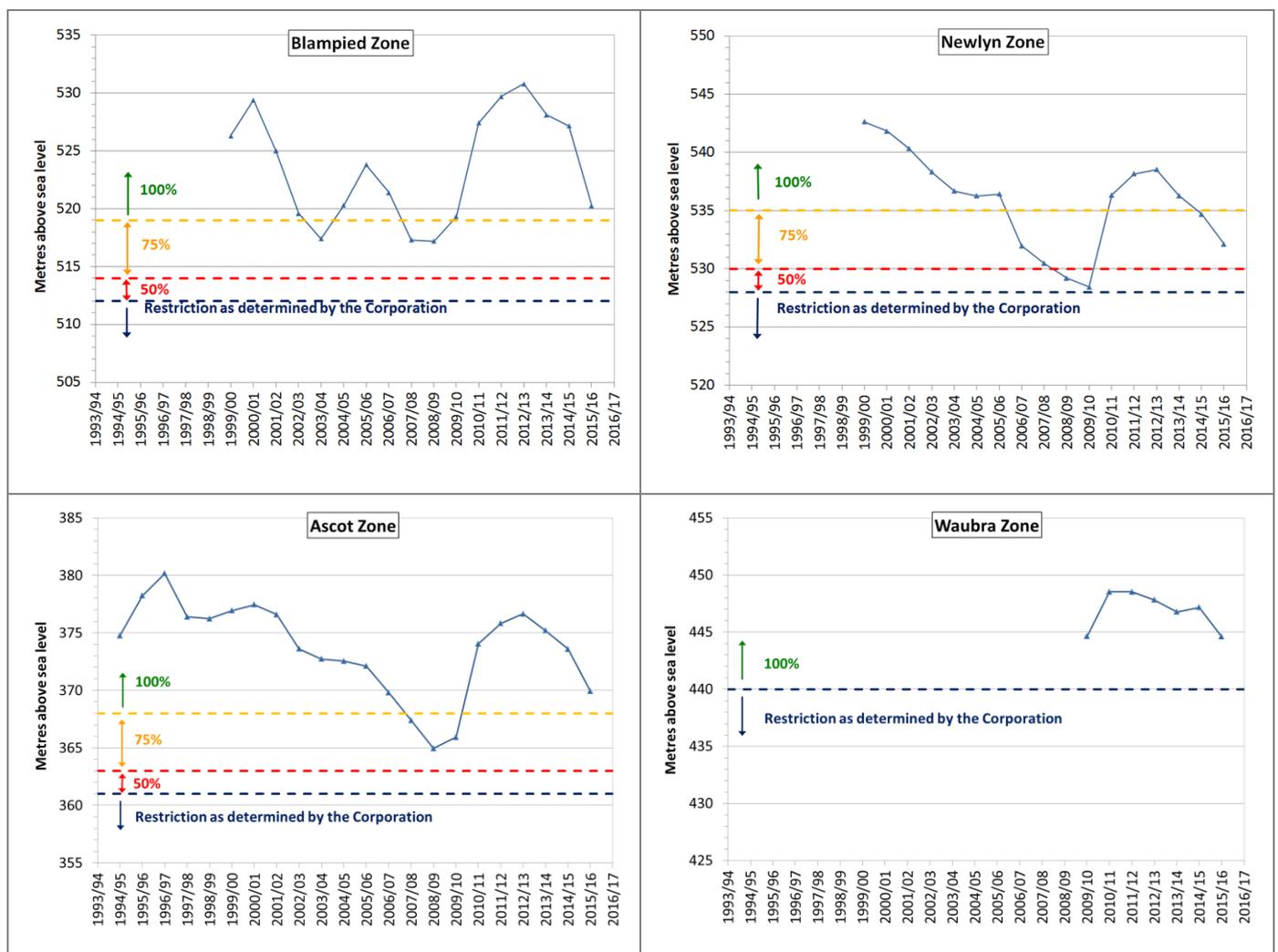


Figure 1 Average maximum groundwater recovery levels to August 2015 compared to trigger levels

## Groundwater use

Metered use in the Loddon Highlands WSPA was 6,904 ML in 2014/15, which is 33 % of licence volume (Figure 2). In the Newlyn Zone, which had an allocation of 75% (2,351 ML), only 34% (1,015 ML) of licence volume was used.

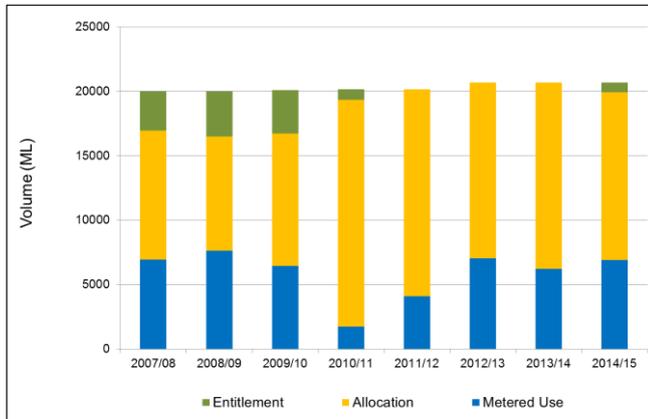


Figure 2 Metered groundwater extractions

## Trading

There were 16 temporary transfers for a total of 1,265 ML in 2014/15 (Figure 3). There were 7 permanent transfers for a total of 310 ML, with 160 ML permanently transferred from the Newlyn Zone to the Ullina Zone.

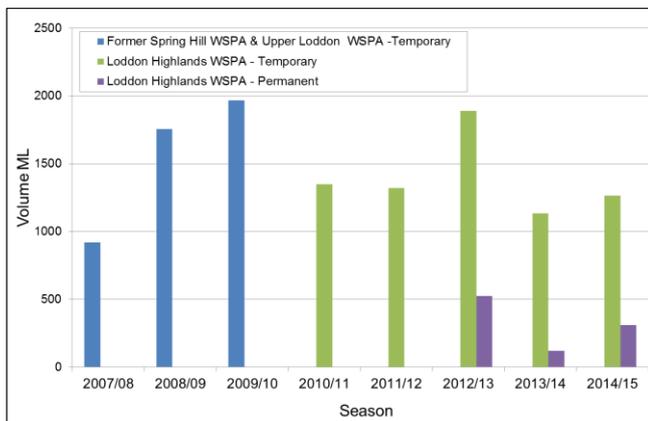


Figure 3 Groundwater trading activity

Licence holders are reminded not to extract more than their licence volume without first obtaining approval from Goulburn-Murray Water and should apply to transfer well in advance of requiring the water.

## 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 5 m, but larger drawdowns were recorded in some areas where there is more intensive groundwater pumping around Newlyn, Blampied and Ascot. The

greatest seasonal drawdown was 13.6 m at bore 46488 in the Ascot Zone (Figure 4). This is consistent with previous seasonal drawdown responses.

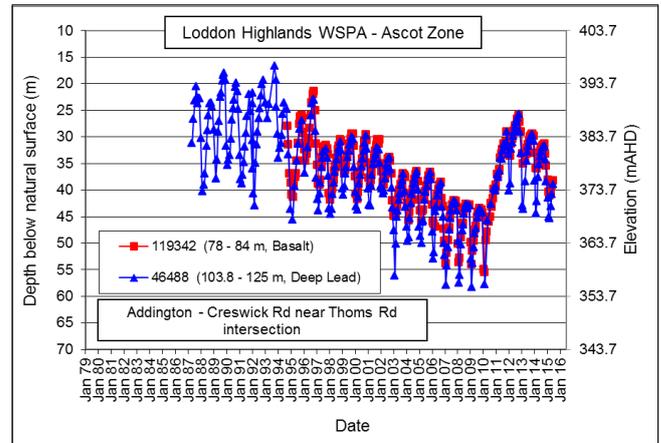


Figure 4 Groundwater levels in Ascot

Groundwater recovery levels have been declining since the wet climatic conditions experienced in 2010/11. Groundwater recovery levels have generally fallen by less than 3 m between 2011 and 2015, but larger falls are seen in bores located in areas of intensive groundwater pumping at Blampied, Newlyn and Ascot.

The fall in groundwater recovery levels across the region may be largely attributed to lower than average rainfall conditions.

## 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 $\mu$ S/cm)
SP069539	Ullina	Deep Lead	1,680
SP068255	Ullina	Basalt	6,840
SP069730	Talbot	Deep Lead	2,110
SP068252	Talbot	Basalt	3,520

## 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](http://www.gmwater.com.au), or call 1800 013 357.