

Lower Campaspe Valley Water Supply Protection Area Groundwater Level Update – May 2021

Purpose

This document has been prepared at the request of the Lower Campaspe Valley Water Supply Protection Area Groundwater Reference Committee to provide information about the likely allocations of licensed groundwater entitlement for the 2021/2022 water year. Allocations for each water year (1 July to 30 June) are announced by 1 July, each year.

Groundwater management

The Lower Campaspe Valley Water Supply Protection Area (the WSPA) is shown in *Figure 1*.

Groundwater resources in the WSPA are managed in accordance with the *Lower Campaspe Valley WSPA Groundwater Management Plan* (the Plan), approved by the Minister for Water in 2012. Goulburn-Murray Water (GMW) is responsible for administering and enforcing the Plan and is required to announce an annual allocation for each of the four management zones by 1 July each year.

Plan objective

The objective of the Plan is to manage groundwater resources equitably to ensure their long-term sustainability. One key aim of the Plan is to maintain groundwater levels to preserve access for existing users.

Allocations determination and announcement

Prescription 1 of the Plan requires that the allocations be based on the average of the maximum annual groundwater recovery levels from the preceding three water years for the following key observation bores (trigger bores), also denoted on *Figure 1*–

- i. bore 79324 (replaced in May-2020; now known as WRK117046) for the northern management zones, being the Elmore-Rochester, Bamawm and Echuca zones; and
- ii. bore 62589 for Barnadown Zone.

In June of each year, GMW reviews water level records collected throughout the water year and determines the allocations for the subsequent water year – refer *Figure 4* for further details.

The allocations are formally announced by publishing them on the GMW website, sending letters to all affected licence holders and placing public notices in local newspapers, in accordance with the requirements of the Plan.

Note: Maximum annual recovery levels in these bores typically occur in late-winter or spring; nevertheless, GMW must allow for the possibility of a higher level occurring later in the year, before setting the allocation for the following water year.

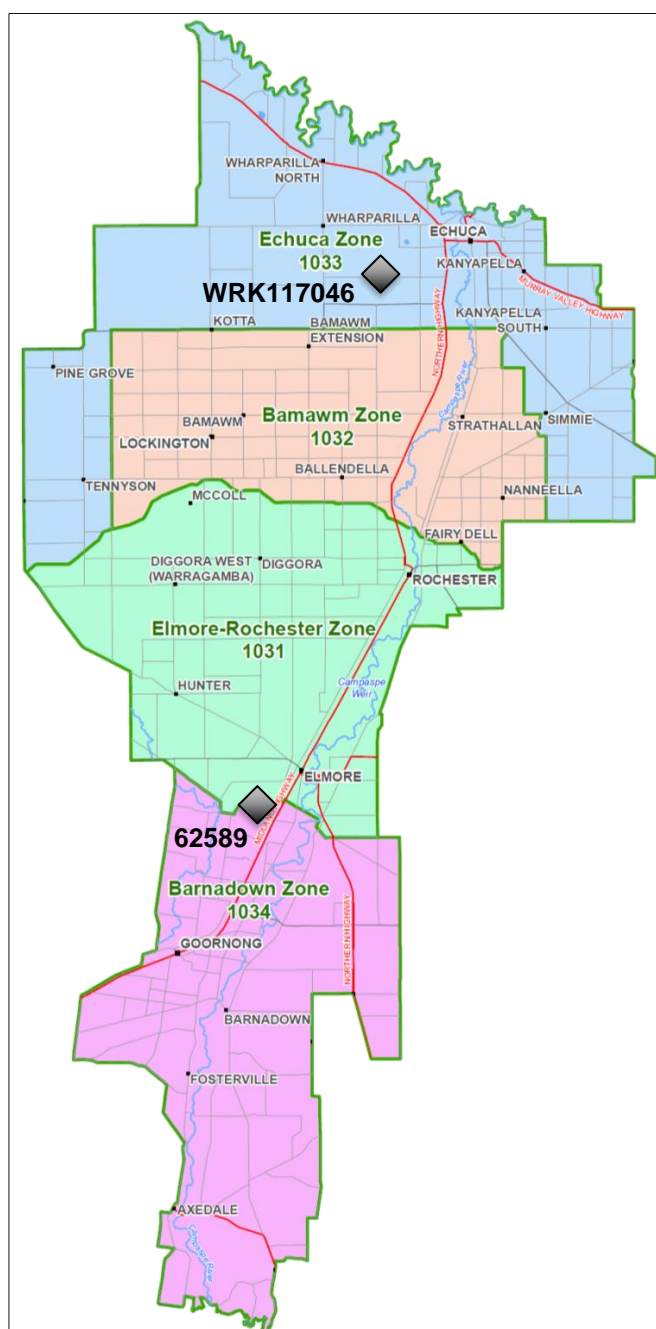


Figure 1 Management zones and trigger bores in the Lower Campaspe Valley WSPA

Groundwater levels update

The Plan requires that groundwater levels are managed through restrictions on the amount of groundwater able to be taken, when groundwater levels decline. These restrictions (referred to as allocations) are based on the average of maximum groundwater recovery levels recorded in each water year, for three consecutive years. This approach, known as a rolling average, is used to slow the introduction of restrictions in dry years. Conversely, it also delays the lifting of restrictions in wetter years. The rolling average is symbolised by the pink diamonds and line in *Figures 2 and 3* below.

1. For the northern management zones–

The maximum recovery level in the trigger bore during the 2018/19 water year was **16.6 m** DBNS which occurred on 14/08/2018. During the 2019/20 water year this was **18.5 m** DBNS, occurring on 24/08/2019. These levels, and previous maximums are shown as blue square dots on *Figure 2*.

The maximum recovery level so far this water year (2020/21) has been 17.4 m on 3/09/2020 (see blue-outlined square marker on *Figure 2*), however the year has not yet concluded. Bearing this caveat in mind, the three-year rolling average is currently 17.5 m DBNS (i.e. $(16.6+18.5+17.4) \div 3$) – see pink-outlined diamond on *Figure 2*. This would result in a 75% allocation being set for the 2021/22 water year, as it is between the 16.0 m and the 19.0 m trigger levels (refer *Figure 4*).

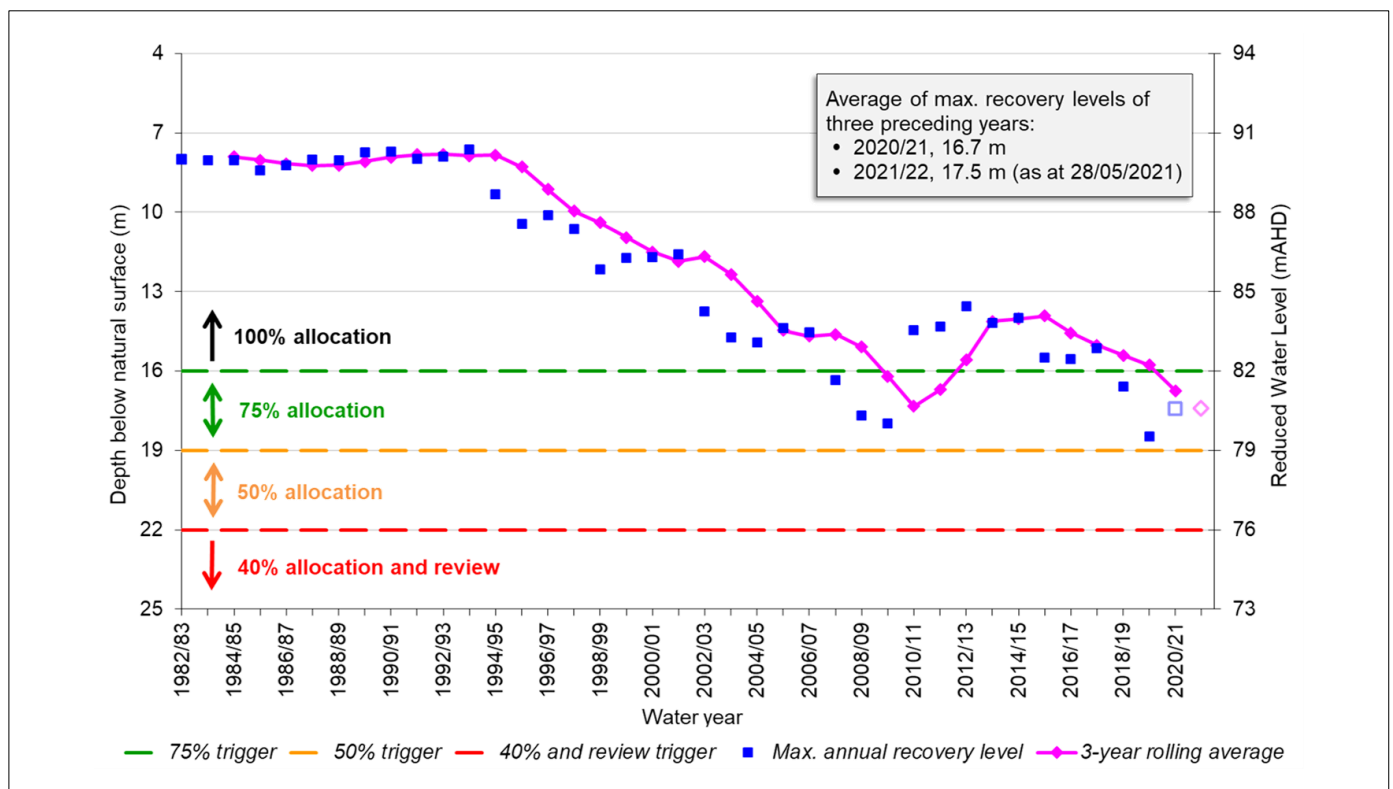


Figure 2 Allocations trigger graph for the northern management zones of the Lower Campaspe Valley WSPA, based on water level data from bore 79324/ WRK117046

2. For the Barnadown Zone–

The maximum recovery level in the trigger bore during the 2018/19 water year was **16.4 m** DBNS which occurred on 6/08/2018. During the 2019/20 water year this was **16.9 m** DBNS, occurring on 10/08/2019. These levels, and previous maximums, are shown as blue square dots on *Figure 3*.

The maximum level so far this year (2020/21) has been 17.2 m on 19/08/2020 (see blue-outlined square marker on *Figure 3*), however the year has not yet concluded. Bearing this caveat in mind, the three-year rolling average is currently 16.8 m DBNS (i.e. $(16.4+16.9+17.2) \div 3$) – see pink-outlined diamond on *Figure 3*. This would result in a 75% allocation being set for the 2021/22 water year, as it is between the 16.0 m and the 18.0 m trigger levels (refer *Figure 4*).

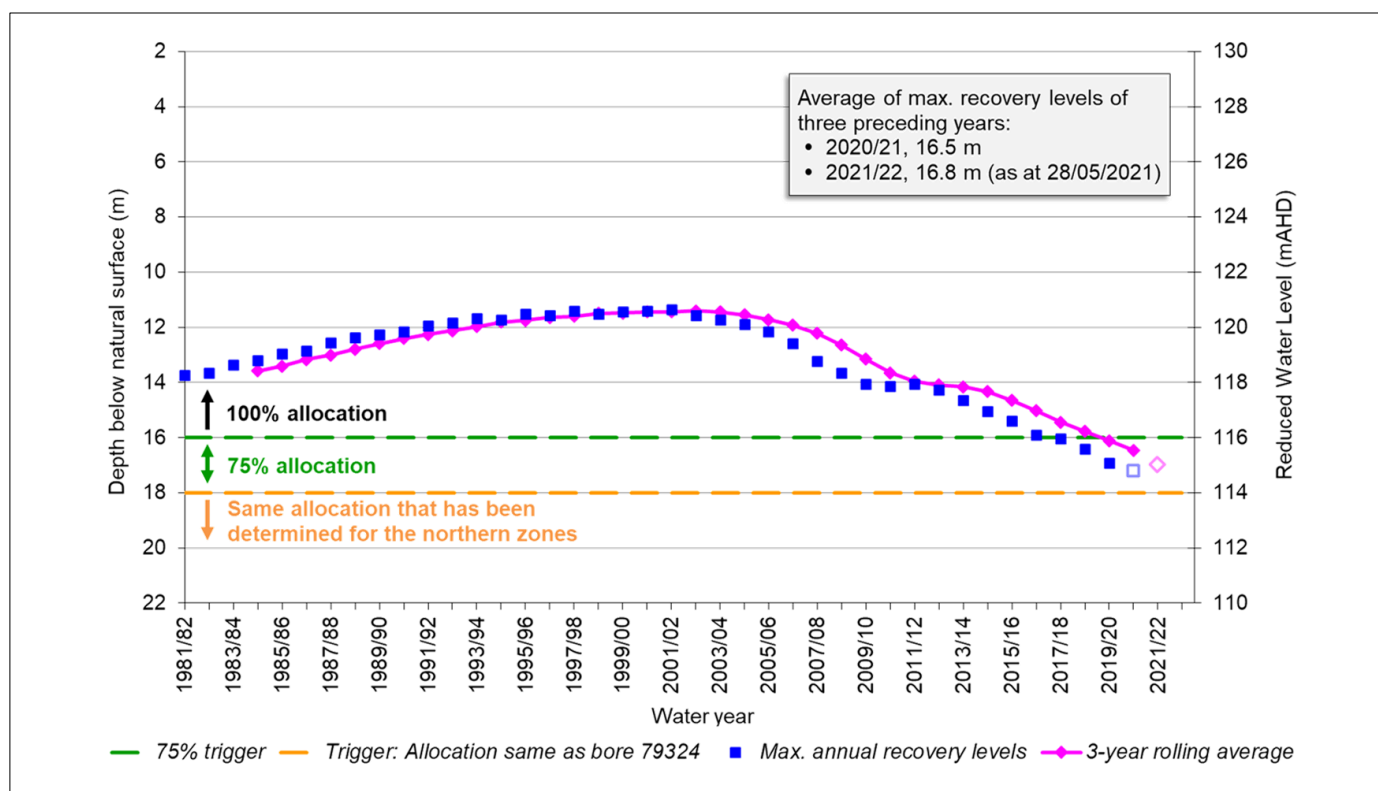


Figure 3 Allocations trigger graph for the Barnadown Zone, based on water level data from bore 62589

Prescription 1 of the Plan – requires that the allocations be based on the rolling average of the maximum annual groundwater recovery levels from the preceding three water years for key observation bores, 79324 and 62589.

For the Echuca, Bamawm and Elmore-Rochester zones–

If the 3-year average of maximum seasonal recovery levels in bore 79324 is:

- a) 16.0 m DBNS or above, an allocation of 100% is to be announced;
- b) between 16.1 and 19.0 m DBNS, an allocation of 75% is to be announced;
- c) between 19.1 and 22.0 m DBNS, an allocation of 50% is to be announced;
- d) below 22.0 m DBNS, an allocation of 40% is to be announced and GMW is to undertake a review of the Plan.

For the Barnadown Zone–

If the 3-year average of maximum seasonal recovery levels in bore 62589 is:

- a) 16.0 m DBNS or above, an allocation of 100% is to be announced;
- b) between 16.1 and 18.0 m DBNS, an allocation of 75% is to be announced;
- c) below 18.0 m DBNS, the same allocation that has been determined for the other three zones is to be announced.

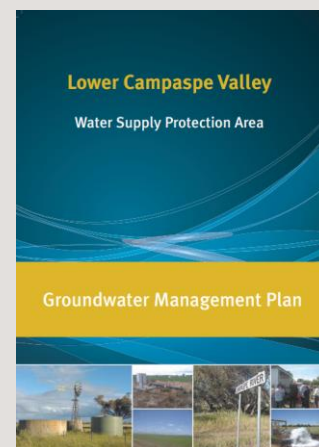


Figure 4 Prescription 1 of the Lower Campaspe Valley WSPA Groundwater Management Plan

Online resources:

- ❖ GMW website: www.gmwater.com.au
- ❖ Lower Campaspe Valley WSPA webpage: www.gmwater.com.au/lowercampaspevalleywspa
- ❖ [Link to the Groundwater Management Plan](#)