

Appendix D - ELMORE SYSTEM



Figure 1: Elmore System showing water sources.

System Overview

The Elmore Groundwater System only supplies the town of Elmore, servicing 380 residential connections and 59 non-residential connections as at 30 June 2018.

Raw water is pumped from two groundwater bores and transferred to the Elmore Water Treatment Plant (WTP). The water is treated and supplied to a 340 KL elevated tank and the township of Elmore. The WTP provides disinfection and ultra violet sterilization.

Water Resources and Demand

Groundwater is drawn directly from the Lower Campaspe Valley Water Supply Protection Area (LCV WSPA) under a groundwater extraction license with an annual volume of a 284 ML. Our license allows up to 71 ML of unused water to be carried over and used in the following year, which is currently adequate to meet the annual demand.

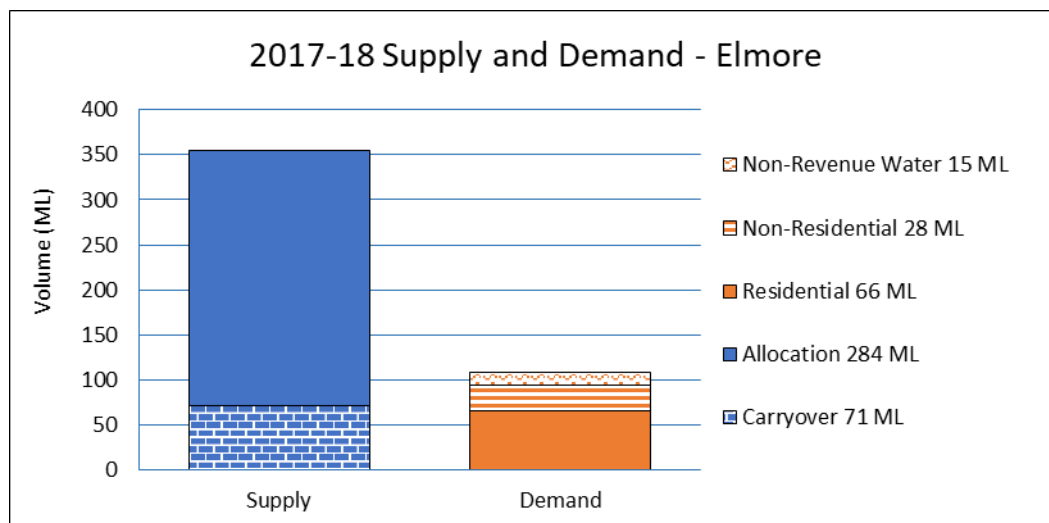


Figure 2: 2017-18 Supply and Demand for the Elmore Groundwater System.

In 2017-18 the demand for the Elmore Groundwater System was 140 ML, which was within the estimated demand range of 122 to 147 ML.

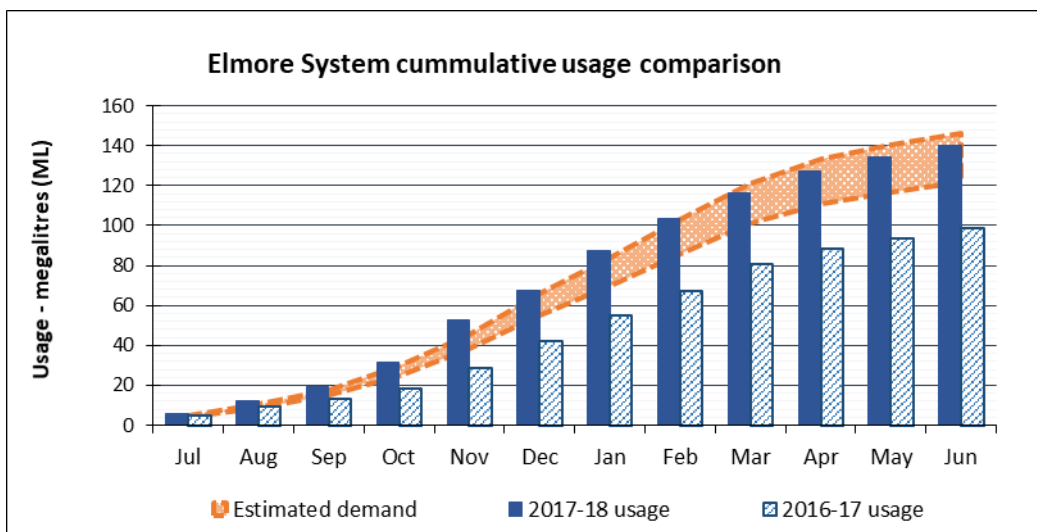


Figure 3: 2017-18 cumulative water usage for the Elmore System compared with the same period last year and estimated demand.

Resource Status

With allocations at 100%, restrictions are highly unlikely for the next 12 months.

Table 1: Supply and demand.

System	Primary Supply Secondary Supply	Supply ¹ 1 Oct' 2018	Demand 'dry weather'	Reserve Status
Elmore	Lower Campaspe Valley Water Supply Protection Area	355 ML	154 ML	>12 months

Note 1: Includes allocation received to date and carryover from 2017-18.

The Elmore extraction license of 284 ML has historically received 100% allocations. However, for five years from 2006/07 to 2011/12 allocations were less than 100%, with the lowest allocation of 65% received in 2008/09 and 2009/10.

In 2008/09, 50 ML of temporary water was purchased to supplement the allocation and to ensure sufficient supply.

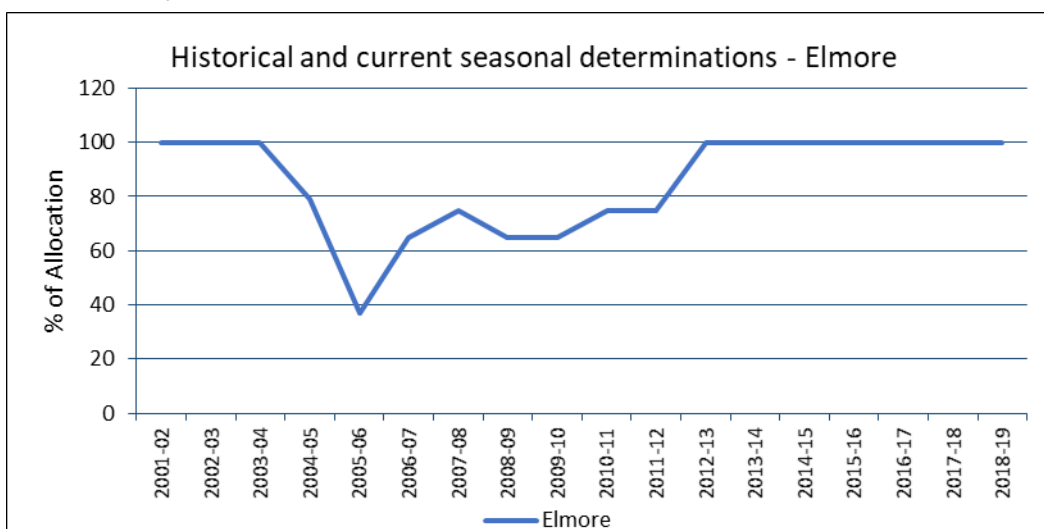


Figure 4: Historical and current seasonal determinations for the Elmore Groundwater System.

Forward Outlook

The 2018-19 estimated dry weather demand for the Elmore Groundwater System is 154 ML. With 100% allocations, the Elmore Groundwater System has adequate reserves to meet demand for the next 12 months. The groundwater supply at Elmore is relatively stable in comparison to surface water allocation from the Campaspe River.

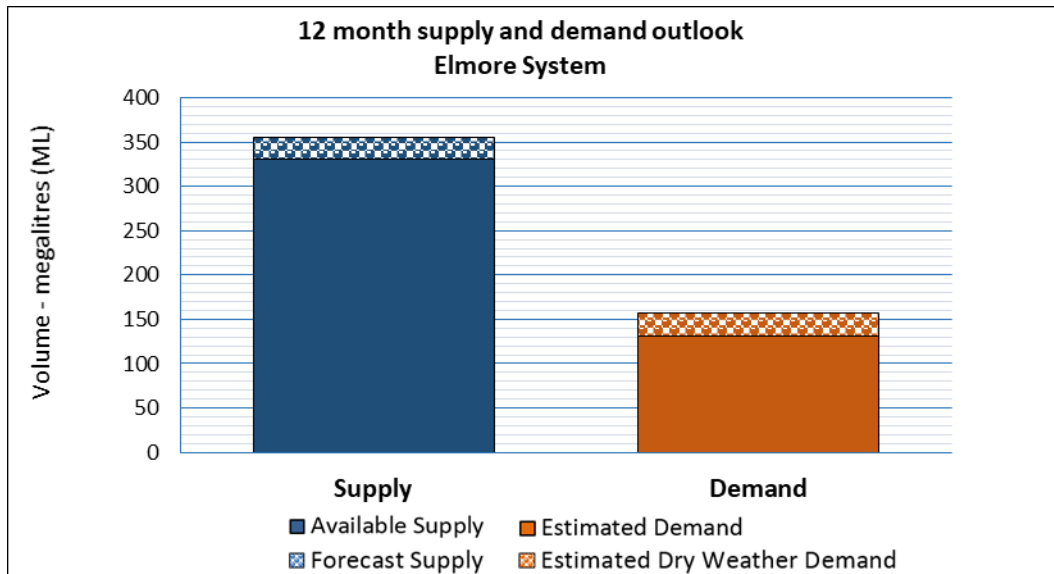


Figure 5: Raw water 12 month supply and demand outlook for the Elmore Groundwater System.

Actions

Coliban Water has continued to engage with stakeholders and customers in relation to the Urban Water Strategy (UWS). Detailed analysis on each system will commence during the latter part of 2018-19.