



Above: Aerial shot of lagoon construction, January 2021



Above: New UV disinfection equipment installed

Phase 2 works progressing

Phase 2 of our Kyneton Solutions Project to upgrade the Kyneton Water Reclamation Plant was anticipated to be completed by December 2020, however weather conditions and the inclusion of additional work packages have impacted our timelines.

The construction of our 200-megalitre storage lagoon (Lagoon 5) is well underway, which will more than double the storage capacity at the plant.

As part of the water balance management at the site, we have identified an opportunity to improve this further, and create an additional 30 megalitre storage. This lagoon (Lagoon 6) will store tertiary treated recycled water from our domestic wastewater treatment stream.

An illustration of the water balance management at the plant is included on page 2 of this update.

Lagoon 6 will provide the opportunity to optimise releases of tertiary treated water to the Campaspe River when there are suitable river flows, in line with our EPA licence requirements.

We are now working through the approvals process with both the Macedon Ranges Shire Council and the EPA for Lagoon 6. Once approved, the lagoon works will commence and be completed in parallel with the construction works already underway onsite for Lagoon 5.

We anticipate both lagoons will be completed by the end of May 2021.

Upgrades to the ultraviolet (UV) disinfection treatment units have been completed this month. The previous units had come to the end of their useful life and have now been replaced. This will ensure a high quality of tertiary treated recycled water continues to be maintained.

Recycled water Expression of Interest (EOI) update

We are continuing to work through the applications received on our EOI process. Finalising this agreement will see the greater reuse of recycled water across the Kyneton community; and the operation of the plant with the intent to release only tertiary treated recycled water to the Campaspe River in the future.

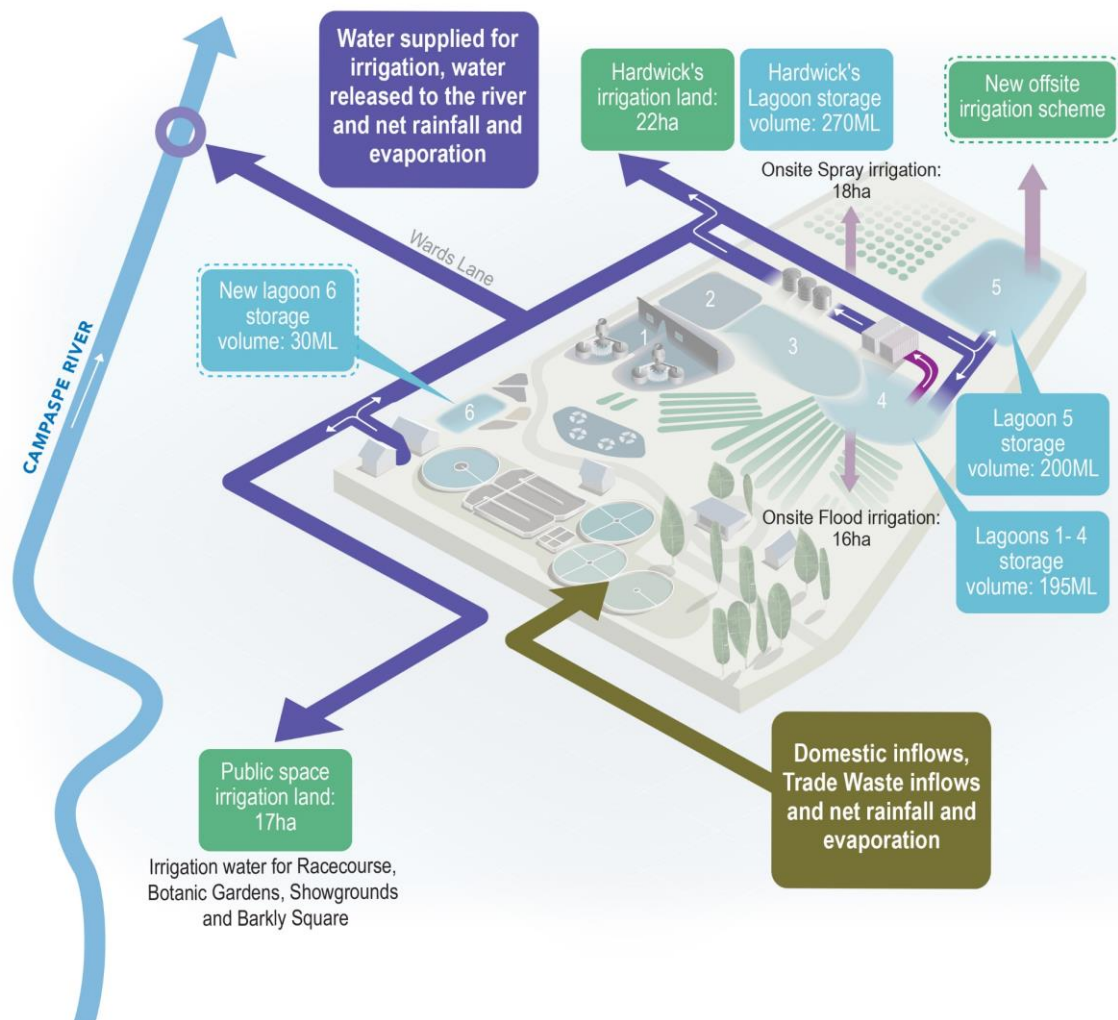
Plant operations

Our storage volumes onsite were approximately 65 per cent as of 23 February 2021.

With the completion of the lagoon work outlined in Phase 2, together with lagoon storage at Hardwick Meatworks irrigation site, we will have a combined storage volume of 700 megalitres.

The increase of storage volume from 200 megalitres to 700 megalitres provides sufficient onsite storage capacity to meet our EPA licence requirements for wet weather events, up to a 90th percentile event.

This multimillion-dollar plant upgrade and sustainable water reuse scheme will help protect the Campaspe River, support local businesses and agriculture, and serve the growing Kyneton community until 2040.



Kyneton Water Reclamation Plant - Water Balance

Water Balance is the calculation between inflows to our plant and outflows, taking into account storage volume, evaporation, rainfall, irrigation and river releases. The aim of the water balance is to be zero. Figures are dependent on weather conditions. In the table at right, we've shown yearly amounts based on figures for extreme dry, average and extreme wet years.

Inflow and infiltration (I&I) refers to water that enters our network that isn't wastewater. It is a complex issue for water corporations which can result in overflows in the network and lagoon volume capacity issues at plants. Most of I&I is from customers' illegal stormwater connections that are connected to our sewer network. It is more common in older parts of towns and cities.

	Extreme Dry	Average Year	Extreme Wet
Available Storage (ML)	695	695	695
Required Storage (ML)	350	400	655
Available Irrigation (Ha)	140	140	140
Irrigation use (Ha)	115	120	80
Domestic Inflows (ML)	530	655	660
Trade Waste Inflows (ML)	285	285	285
Net Rainfall / Evaporation Inflow (ML)	0	0	120
Net Rainfall / Evaporation outflow (ML)	-240	-65	0
River Release (ML)	0	-275	-410
Irrigation use (ML)	-575	-600	-400
Contingency storage above 400ML	0	0	-255
Water Balance	0	0	0

The available irrigation (Ha) identified above is subject to the finalisation of the EOI.

An extreme dry year has high evaporation and irrigation demand but lower inflows and storage are required.

An extreme wet year has high inflows and high levels of rainfall captured in lagoons, which increases storage demand and high river release capability.

Disclaimer: Information contained in this document was correct at the time of publication