

WAMURAN IRRIGATION SCHEME

Project newsletter

December 2023



Unitywater

Serving you today, investing in tomorrow.



Wamuran farms

Construction complete

Construction started in March 2022, with the pipeline component of the project now complete.

- ✓ 22km of pipeline installed through open trenching and drilling
- ✓ Using Horizontal Directional Drilling techniques, we installed pipe under the Queensland Rail line at Beerburrum, the Caboolture River and Caboolture State High School, among other sensitive locations
- ✓ Installed a floating pump station on Moodlu Quarry
- ✓ Established 'hairy habitat' on Moodlu Quarry to help mitigate the risk of algal blooms in the Moodlu Quarry
- ✓ Constructed a 3 megalitre balance tank at the Moodlu Quarry to store treated Class A water before being transferred to farms in Wamuran.

About the Scheme

The Wamuran Irrigation Scheme will support the region's growth by sustainably managing wastewater from Unitywater's Caboolture South Sewage Treatment Plant (STP) to deliver Class A recycled water to farms in the Wamuran region. We're giving the water a new life and helping grow the local economy.

This Scheme plays an important role in balancing population growth and sustainability. Stage 1 will deliver about 2.6 gigalitres of water each year to farms in the region and see 11 tonnes of nitrogen and 1.8 tonnes of phosphorous diverted away from the Caboolture River annually.

As the population grows and the supply of Class A recycled water can be increased, more will be distributed and more growers from the region will be able to access the Scheme.

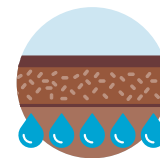
The Scheme will not only supply high quality recycled water to growers in our region but will also help us meet our pledge to reach net zero nutrients to waterways by 2040.



Net zero carbon emissions



Net zero nutrients to waterways



Net zero biosolid waste to landfill

Project timeline



Stage 1 alignment



Pullback of pipeline under Beerburum Road, Caboolture



Aerial view of Moodlu Quarry balance tank and associated infrastructure.



Caboolture South
Sewage Treatment Plant
and Recycled Water
Disinfection Facility

i For public safety and to protect Unitywater's infrastructure, access to Moodlu Quarry is permanently and strictly prohibited.

How the Scheme works

Wastewater from the Caboolture South STP will be treated in a disinfection facility before it is transferred via a 10km pipeline through Caboolture to the Moodlu Quarry storage facility.

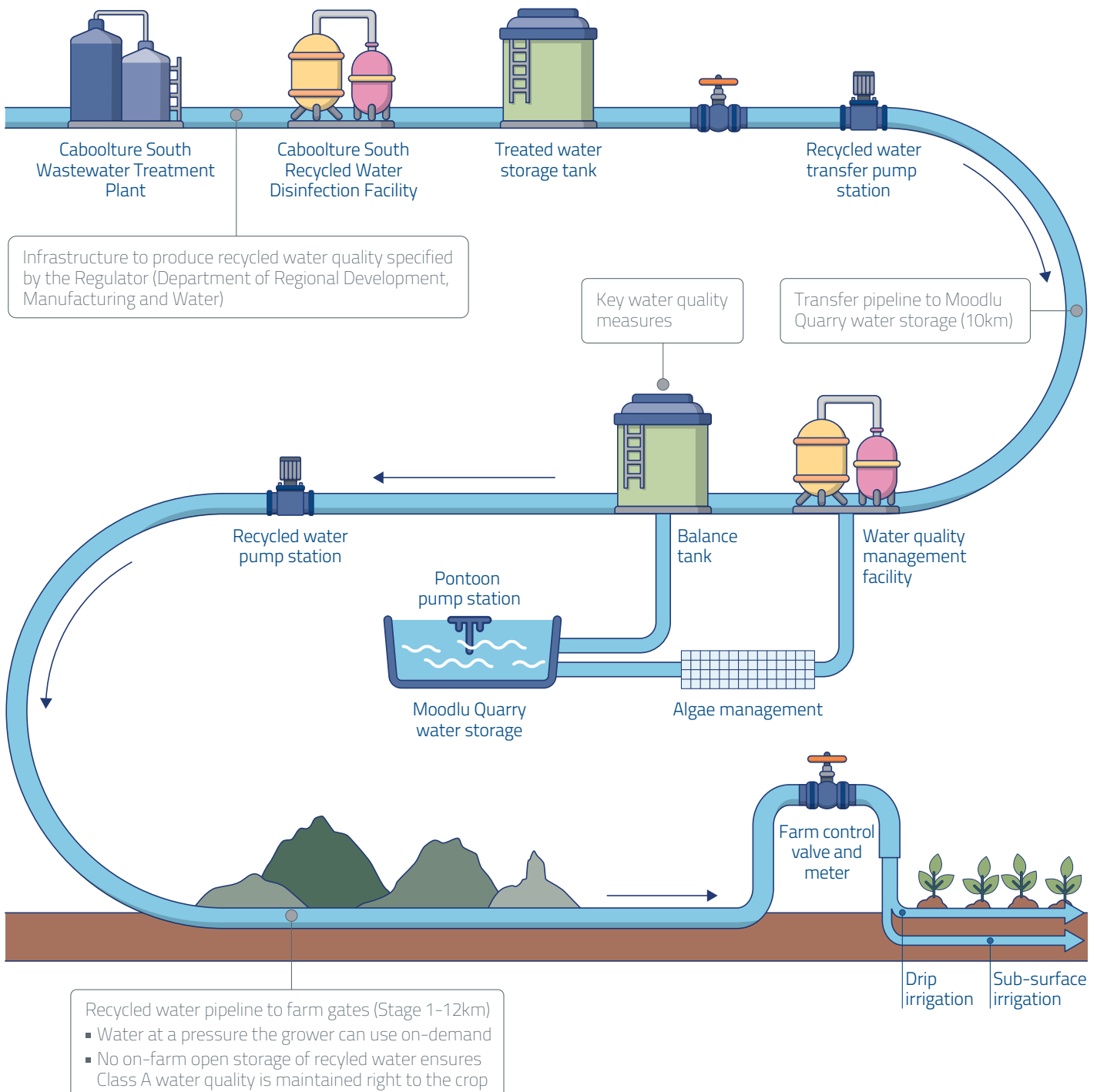
Moodlu Quarry will be used for mid-stream balancing storage to ensure that surplus water is held to meet peak seasonal crop demand of up to three times current daily production.

Moodlu Quarry is critical to the Scheme's success. The site is now a water storage facility and home to a balancing tank, our distribution pump station and a floating pump station along with other critical infrastructure.

In Stage 1, water will be delivered to farms from the Moodlu Quarry pump station through another 12km pipeline to safely irrigate turf and crops.

The Wamuran Irrigation Scheme will allow growers to build strong businesses that aren't vulnerable to changes in weather events and patterns, building a solid foundation for the future

Twin View Turf General Manager,
Lawrence Stephenson





Moodlu Quarry floating pump station and 'hairy habitat'

Moving toward a circular economy

The Wamuran Irrigation Scheme is one of Unitywater's key sustainability projects working toward a cleaner future for us all.

We will continue to embrace innovation, foster collaboration, and drive collective efforts towards a greener and more sustainable world.

Unitywater is committed to improving the ecological health of waterways in our region by embracing nature-based solutions, innovative wastewater treatment and integrated water management opportunities. We aim to combat excessive nutrients in our rivers and achieve our goal of net zero nutrients to waterways by 2040.

We'd like to thank the community for being part of the project and particularly those that supplied materials (including asphalt and quarry products), serviced fleet vehicles and provided traffic management services. A special shout out to The Daily Grind coffee cart for keeping our team caffeinated at the early morning toolbox meetings. We've had around 130 staff and contractors from the region involved over the last 18 months of construction.

What's next?

Whilst you might not see much activity around the region, our contractor at the Caboolture South Recycled Water Treatment Plant is progressing towards construction completion at the end of the year and commissioning early in 2024.

Following that, we will be kicking off a rigorous testing and verification process to make sure everything is working as planned; from the chemical dosing system and the ultraviolet disinfection treatment process right through to testing the pumps and pipes.

This will demonstrate that the Scheme works, treating effluent to a Class A standard suitable for use on minimally processed food crops.

The results of the testing and verification will form part of the Recycled Water Management Plan (RWMP) we will submit to the Department of Regional Development, Manufacturing and Water and Queensland Health in mid-2024. Whilst the Department is reviewing the RWMP, we can distribute the Class A recycled water to a turf farm then, pending approval of the RWMP, we will start sending water to minimally processed food crops in late 2024.



Tanya from The Daily Grind and project team on site

For further information

Contact the construction team on [1300 086 489](tel:1300086489), email community@unitywater.com, or visit unitywater.com/wamuran

