



Picton treatment and reuse

October 2020

We are improving how we manage wastewater in your local area by upgrading the Picton Water Recycling Plant. We are identifying opportunities to maximise reuse by supplying recycled water to agribusinesses, providing additional treatment and increasing our discharge capacity. This will allow us to extend our current service for residential, commercial and employment growth and development, while minimising the impact to local waterways and the environment.

The Picton Water Recycling Plant currently treats wastewater from up to 5000 homes and businesses. The community has grown and the plant has reached its capacity to manage the disposal of recycled water produced following treatment.

We are currently using the recycled water to irrigate 119 hectares of land at our Picton Farm. On occasions, we discharge excess recycled water into Stonequarry Creek. The amount of water we can discharge into the creek is regulated by an Environmental Protection Licence issued by the NSW Environment Protection Authority.

As inflow to the plant increases we need to find new ways to manage the additional recycled water.

Our solution

Sydney Water has been working collaboratively with the Environment Protection Authority, Wollondilly Shire Council, key stakeholders, and a Community Reference Group to develop a solution for increasing treatment at the plant, which maximises reuse while keeping customer costs low and minimises the impact to the local environment.

Our preferred solution will:

- upgrade the treatment process to improve the quality of recycled water produced at the plant

- expand recycled water use to other farms near the plant, where feasible and with landowner agreement
- seek greater flexibility in our licence to discharge to Stonequarry Creek or, if that's not possible, at an alternative location to the Nepean River.



Increasing recycled water reuse for agribusiness

This will allow more homes and businesses to connect to the wastewater system that services Picton, Tahmoor, Thirlmere, Bargo and Buxton – where approvals and infrastructure requirements are in place.

To find out more

To find out more on this project please visit our project website at <https://www.sydneywatertalk.com.au/pictontreatment>

You can also contact the project team at WestRegionDelivery@sydneywater.com.au or call 1800 953 818.

Your feedback is important to us. We will be displaying the Review of Environmental Factors for the project in late 2020, to seek your feedback on the preferred solution.

During the display, we will hold community events where you will be able to meet the team and find out more about the work.

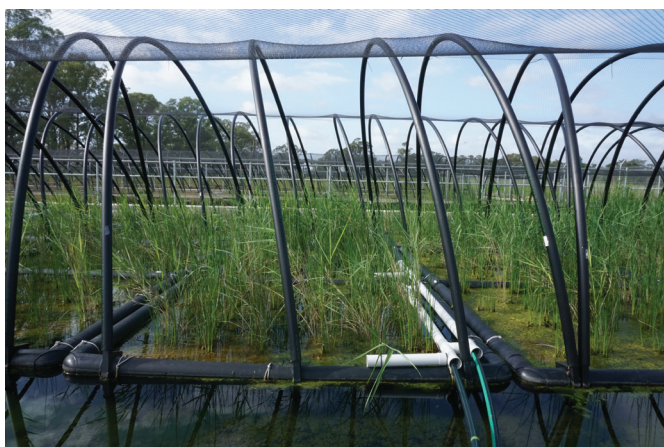
Other projects at the Picton Water Recycling Plant

Pilot wetlands project

We are investigating the role wetlands can play in our treatment process to minimise the nutrient levels in treated water and improve water quality.

This 'green infrastructure' may help to improve the treatment process whilst requiring less energy, chemicals and lower costs than alternative technologies.

In mid-2019 we constructed four small wetlands at the Picton Water Recycling Plant to test two different types of wetlands; floating and shallow. We will be assessing the performance of each, including strengths and weaknesses in reducing nutrient levels.



Picton wetland trial floating wetland

The wetlands will grow and mature over the next two years. We've just started water quality monitoring and are planning to start performance testing in 2021.



Picton wetland trial shallow wetland

Macroalgae trial

The macroalgae project will use algae to reduce nitrogen and phosphorous in treated water.



Macroalgae trial planned from 2021

Like the wetlands trial, we'll be looking to compare the cost and performance of this bioremediation approach compared to other technologies, alongside the benefits of using the harvested algae for agriculture.

The project is planned to run from 2021 to 2022.

Contact us

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