

Waterproofing Playford Recycled Water Scheme

Waterproofing Playford is a water security program that provides water for irrigation across the City of Playford. It includes five wetland sites that collect and treat stormwater, which is stored in underground aquifers and used for irrigation during summer.

Currently, City of Playford has two sources of water for irrigation:

- Managed Aquifer Recharge (MAR) recycled stormwater
- Native Groundwater (bore water).

Managed Aquifer Recharge (MAR) Stormwater to aquifer in wet months injection well irrigation of schools, ovals and parks Clay natural recharge T2 Aquifer Confining Layer

What happens in the aquifer?

Water is safely injected into the aquifer, where it is stored at one hundred metres below the surface and extracted for irrigation.

What are the opportunities for securing water in the future?

Council has committed funds towards improving City presentation and securing water for the future.

City of Playford is proposing an additional alternative for irrigation, using treated recycled water. This will involve connecting to the Virginia Pipeline Scheme, where the same water is used to irrigate the State's food bowl.

The Virginia Pipeline Scheme established in 1998 supplies recycled water from the SA Water Bolivar Wastewater Treatment Plant for horticultural irrigation in the Virginia and Angle Vale areas. The Virginia Pipeline Scheme is owned and operated by Trility Pty Ltd and supplies to about 400 customers.

Types of Irrigation Water		
Recycled stormwater	Native groundwater (bore water)	New proposed recycled water from the Virginia Pipeline Scheme



Where will the water be used?

The water will be used to irrigate Council reserves, sports fields, community and school ovals.

What are the benefits to using recycled water?

Environmental Benefits

Using recycled water reduces the demand on existing water resources such as the River Murray and native groundwater. Council's wetlands and processes used to capture, treat and harvest local water increase local biodiversity.

The wetlands also provide opportunities for environmental education and scientific research, helping to ensure City of Playford's goal of being a responsible and sustainable City.

Economic Benefits

The use of recycled water on Council's sports fields, parklands, community and school ovals will provide significant cost savings. This means that despite water restrictions council reserves, parks and ovals can continue to be used all year round for recreation and active sports use.

Social Benefits

The development of five wetlands in the City of Playford used for irrigating landscapes, community parks and school ovals has enhanced our city presentation making it a more attractive place to live as well as providing recreational areas.

What is the approval process to use recycled water?

The approval process is heavily regulated, in order for Council to successfully obtain a licence to use recycled water.

Council has conducted a feasibility study to determine water security viability and availability, as well as groundwater modeling and a risk assessment for licensing approval.

The licensing requirements include:

- EPA (licence to inject water into the aquifer)
- DEWNR (licence to extract water from the aquifer)
- Department of Health (ensures that the water is fit for purpose)

Council will need to apply for a new licence to inject and store treated recycled water from the Virginia Pipeline Scheme for irrigation use.

How will Council manage the site?

Council already successfully manages five sites.

- Olive Grove
- Stebonheath
- Stebonheath and Curtis
- Munno Para
- Nexy Basin

The Waterproofing Project proposes to use recycled water from the Virginia Pipeline Scheme. The recycled water will be diverted into Council's existing MAR system at the corner of Stebonheath and Curtis Roads, Munno Para where it will be managed and stored.

What is the quality of the water?

Water is treated at the SA Water Bolivar Wastewater Treatment Plant, where it goes through an extra stage of filtration to make it fit for the purpose of irrigation.

Fast Facts

Council currently has 38 kilometers of pipe for irrigation use.

The new water model proposes to use between 150-300 megalitres per year for irrigation, which equates to around 50 Olympic swimming pools of water.

For further project details contact Chris Burgess on 8256 0333.

