

# *Paratfield*

## Stormwater Harvesting





You may have noticed white netted areas near the Parafield Airport while travelling along Kings Road or Main North Road at Parafield. What you may not know is this netting is stretched over Salisbury's Parafield wetland system known as the Parafield Stormwater Harvesting Facility. Sometimes referred to as 'The Water Factory', this is one of Salisbury's largest water harvesting scheme.

The entire system is covered by large nets to prevent birds from nesting in the area. This also ensures birds do not get in the flight path of the aeroplanes at the Parafield airport. These nets are not only visible from the ground but are highly visible and recognisable from the air above.

*Salisbury... the green city*

Parafield Stormwater Harvesting Facility  
recycles 1100 million litres per year

**Please note: This site is not  
accessible to the public**

The Parafield Stormwater Harvesting Facility originated from a discussion in 1999 between City executives and the management of G.H. Michell & Sons, Australia's largest wool processing company.

The company's processing involved large quantities of fresh water to scour the wool which in turn produces large quantities of waste. The costs of fresh water and waste disposal were high enough to force the company to consider alternative and cheaper locations, potentially resulting in the loss of around 600 local jobs at the time. By using Salisbury Water and making considerable savings on water usage, the company has been able to sustain its local operation.

The Parafield stormwater project involves diversion of stormwater from a 1600 hectare catchment. The water is held for a period of up to 10 days while the water is analysed to ensure there are no contaminants present. The water is pumped to a holding basin, from where it gravitates through a 2 hectare cleansing reed bed. Throughout this process the quality of water is continually monitored via electronic probes to ensure the water does not breach strict licencing guidelines.

Nutrient and pollutant loads are typically reduced by up to 90 per cent through this process. The system is designed to hold stormwater for

around 10 days to ensure optimal treatment efficiency. The current harvest capacity of the scheme is 1100 million litres per year with ideal rainfall.

Continuity of supply is gained through the creation of a large underground storage area for the recycled stormwater. This is achieved by the development of an Aquifer Storage and Recovery (ASR) system. Two ASR bores (depth 180m, T2 Aquifer) have been installed onsite. A further six T2 wells are located on the opposite side of the railway line. The water pumped into the aquifer is metered to ensure that when the water is pumped back out again during the summer months, the aquifer is not harmed from extracting too much water.

Michell Wool continues to receive Salisbury Water, helping to reduce their costs. The water produced at Parafield also supplies residents at Mawson Lakes where it is mixed with recycled wastewater from the Bolivar Sewerage Treatment Plant in the large mixing tank located at Greenfield Wetlands. The water is used to irrigate Council reserves and many schools ensuring Salisbury remains a 'green city' right across the city.

Technical tours for educational facilities are available by appointment.  
If you would like to book a tour, please contact the  
City of Salisbury on 8406 8222.

