# the Greenfields Wetlands

Welcome to Greenfields Wetlands Self Guided Tour. We hope you enjoy discovering this wetland and surrounding area, and its inhabitants.

There are just a few safety recommendations and points of interest that you should be aware of:

- This booklet illustrates some interesting highlights that can be seen BEFORE entering the wetalnds trail front gate.
- The wetland Self Guided Tour begins at the gates (pictured above) located on the north west side of the Watershed carpark.
- Please follow the trail and stay on the path / boardwalk.
  This will minimise wildlife distrubance and reduce impact on vegetation.
  - Try to reduce your noise level. This will increase your chances of being able to view the birds and other wildlife.
- Beware of ants. Some sections of the path may have ant nests.
- Wear appropriate sun proection and walking shoes.
- If you see a snake, stay still, and wait for it to move away.
- The wetlands are a litter free zone, please take all rubbish home with you.
- A toilet can be found at the front of the Education Resource Centre located near the front entrance of the wetlands.
- Dogs are not permitted into the wetlands. Guide dogs are exempt.





# Greenfields Wetlands

The Greenfields Wetlands were constructed by the City of Salisbury from 1990-1995, to fulfill a number of roles:

- Improve water quality entering Barker Inlet by diverting water from Dry Creek into the wetland.
- Provide valuable habitat for wildlife.
- Enhance the landscape and provide flood protection.

Prior to the 1980's the Greenfields wetland site was known as 'Elders Stock Paddock' and was generally used for holding stock before sale at the nearby Gepps Cross abbattoirs and sale yards. By 1980, this land was no longer necessary for the livestock industry, thus the initial wetland concept plan begun.

The 42 hectares of constructed wetlands now support a wide variety of plants and wildlife including a variety of bird species, water plants, fish, frogs, macro-invertebrates, long neck tortoises, snakes and lizards. You will find some informational signs along the trail highlighting specific wildlife which you may discover while wandering along the trail.

As you meander along the wetland trail, you will be amazed at how immersed in the wetland habitat you will feel, even though the wetlands are situated in between two main roads, being the Salisbury Highway and Port Wakefield Road. Make sure you pause to take in the sights, sounds and smells of nature in this thriving, purpose built environment. We hope you enjoy discovering the natural beauty of the wetlands on your walk.



Greenfields wetlands

# Watershed

The area in which the Greenfields wetlands is located is known as the Watershed Sustainability Precinct. The term Watershed reflects an abiding concern with sustainability, and in particular water management.

The City of Salisbury is committed to an ongoing strategy of sustainability. This is not a narrowly focussed initiative but one which is designed to achieve viable fulfilling and rewarding lifestyles for our community, a thriving and progressive business sector and responsible and innovative management of our environment and natural heritage.

The Watershed Cafe building, located onsite, was once the Delfin Land Sales Office - which has been re-purposed to be the building it is today. The Watershed Cafe is open from 8am - 4pm daily. The expansive decking and tranquil surroundings offer a perfect backdrop to sit back and enjoy a drink or bite to eat after walking through the wetlands.



Watershed Cafe building

#### Mawson Lakes Water Tank

Before entering the front gates to the wetlands, if you look to your right you will see the Mawson Lakes water tank. Treated waste water from the Bolivar Treatment Works, known as reclaimed water, is mixed with treated stormwater from the Parafield Airport Wetlands in the large water tank located on the Greenfields site. The water is then supplied to Mawson Lakes for use in toilet flushing, watering of gardens and vehicle washing. This water is supplied through a purple pipe system with a purple tap so that it cannot be confused with mains (drinking) water. This system is operated by SA Water.

#### Together Woven

Also before entering the front gates to the wetlands, you will see the Together Woven sculpture in the grassed area at the back of the Watershed carpark. Together Woven is a Heritage Marker located on the Greenfields site by artist team Marijana Tadic and Alexis West (artist) commissioned by the City of Salisbury in 2012. The artwork resembles a flock of birds suspended in the sky. The hollow part within the net suggests that a boomerang has flown through. The concept is based on the traditional Kaurna heritage practice. The Greenfields sight was chosen to house the sculpture as it is an area of archaeological significance. The area once supported significant numbers of Kaurna People who were the original inhabitants of the area and the foundation of the social history of the Salisbury area.



Together Woven



Mawson Lakes water tank



Purple tap used to supply recycled water

## Natural Cleansing of Water

Stormwater run-off is captured in the wetland where it undergoes a natural cleansing process as the water filters through the wetlands, such as Greenfields. In constructed wetlands, natural processes - physical, chemical and biological are used to filter and clean the stormwater.

These processes include:

- the filtering of larger particles through reeds
- aquatic organisms absorbing organic matter
- the effect of sunlight and oxygen on bacteria
- · aquatic plants absorbing nutrients
- the settling of sand, clay and heavy metals onto the bottom of the wetland.

These processes remove over 80% of all sediments and pollutants from the water. Council regularly monitors the quality of the stormwater that enters and leaves the wetlands - for sediments, salinity and a range of pollutants and nutrients. Following the cleansing process the water is then harvested and pumped underground into natural sandy limestone aquifers.

## Harvesting our Stormwater

The City of Salisbury harvests stormwater after it has been cleansed in the wetlands. Stormwater generally needs to be held just 10 days for it to be clean enough to be used to irrigate public gardens or ovals, or to recharge depleted underground aquifers.

Managed Aquifer Recharge (MAR) ASR (Aquifer Storange and Recovery) is just one of the techniques that the City of Salisbury employs. During the high rainfall months, the cleansed water is pumped into the aquifer approximately 160-220m below ground. During summer, this water can be extracted to irrigate ovals and turf areas, helping to keep the City green.

Storing water in aquifers reduces the risk of biological contaimination and the loss of water through evaporation. However, Council must be careful not to remove more water from these aquifers than what is injected. A State Government (Department of Environment Water & Natural Resources, DEWNR) licensing system allows for the extraction of only a percentage of the water injected into the aquifer.

At the Greenfields wetland site, the City of Salisbury is only able to inject water into the aquifer; extraction is not permitted. **The injection pipework can be seen on the left as you enter through the front gates to the wetland.** There are 4 bore wells located at Greenfields used for injection, including the one on the inside of the compund as you enter the Greenfields front gate and 3 others distributed around the grounds of the wetland.



Injection headworks at Greenfields

Extraction is not permitted at the Greenfields site due to the cone of depression under the Greenfields site (largely caused by the large volumes of water extracted over time by the Salt fields that were once operational and located on the other side of Port Wakefield Road). In return for the water injected into the aquifers at Greenfields, the Council generates water 'credits' which may be used to extract a percentage of water at community bores located throughout the City of Salisbury near schools and sportsfields. This extracted water is known as Salisbury Water.



Salisbury (recycled) Water sign

#### Salisbury Water

Salisbury Water is the term Salisbury uses for its recycled water. Salisbury Water is primarily recycled stormwater and native groundwater.

Salisbury Water is treated to a standard that is satisfactory for its intended use. The water is then distributed, via the recycled water pipe network, throughout the City of Salisbury to the reserves and sporting fields to help keep the City green.



Irrigation of reserves throughout the City

## Wetland Trail & Bird Hide

Upon entering the wetland front gates and crossing over the first bridge you will have the choice to veer right to continue to the bird hide or turn left over the second bridge to follow the interesting 2km walk through the wetland.

#### Bird Hide

# To access the bird hide veer right after the first bridge upon entering the wetland front gates.

The wetlands provide a great food source for birdlife and provide an area where they are reasonably protected from predators such as cats or foxes. Over 160 bird species have been recorded in the Greenfields wetlands. The area supports large and increasing breeding populations of wetland birds. Some birds you may see while wandering through the wetlands include: Rufus Night Heron (Nankeen Night Heron), Black Winged Stilt, Little Pied Cormorant, Purple Swamp Hen and the Great Egret. The bird hide was built as a way for us to watch the birdlife without disturbing or scaring them. Enter the bird hide at the end of the path. The bird hide contains various paintings of more birds you may be lucky enough to see while at Greenfields.

Once finished in the bird hide you must retrace your steps until you reach the first foot bridge to continue on the walking trail or to exit the wetlands.

#### Wetland Trail

To access the 2km wetland trail walk you must turn left after the second bridge. This trail is not wheel chair accessible. Follow the mulch path cut through the bush, over bridges that connect many islands and board walks through the dense reed beds. Allow yourself 30-40 minutes for a casual meander along the trail circuit. Resting areas with benches are located at the half way mark.

A map can be found on the following page.



Rufus Night Heron



Purple Swamp Hen

adjacent to the bird hide at Greenfields. Purple Swamp Hens are common at Greenfields and can often be seen in pairs. They forage in the reed beds on the water's edge, building their nests on an elevated trampled

bed of reeds.



Bird hide



Black Winged Stilt Black Winged Stilts often gather in large flocks. When restless they are very vocal, making a characteristic single high pitched 'yap' sound similar to that of a small terrrier dog.

# Greenfields Wetlands



#### Group Guided Tour Bookings

The City of Salisbury offers Guided Tours of the Greenfields wetlands for community and sporting groups. These tours are run by City of Salisbury volunteers. Times and days are dependant upon availability. Please contact the City of Salisbury for further details.

#### City of Salisbury

12 James Street, Salisbury SA 5108 P: 08 8406 8222 E: city@salisbury.sa.gov.au W: www.salisbury.sa.gov.au

#### Legend

Wetlands Nature Trail Return journey 30-45 minutes (no disabled access)

Start

- Trails with disabled access