

Wetlands



sustainable
salisbury

“The need to waterproof Adelaide is very urgent. We see wetlands as part of the solution. The City of Salisbury is a trailblazer in the development of wetlands and aquifer storage and recovery, and we see similar opportunities in other suburbs.”

Don Hopgood
Chairman, Waterproofing Adelaide Strategy
Advisory Committee

In the dramatic population growth of the 1960s and 1970s, much of the natural vegetation and landscape diversity of Salisbury was forsaken to make way for homes, factories and roads. The original low woodland was almost totally cleared, except for small pockets of remnant native vegetation on hills and in gullies.

New residents of the mid to late 20th century lived with a parched perception of the North. However, through careful planning, consultation and action, the appearance of Salisbury has been progressively transformed with the introduction of a water catchment management strategy of national significance and global importance.

Stormwater – traditionally regarded as a problem, and in some cases a threat – has been harnessed and utilised in a series of wetlands, enhancing the landscape and creating healthy eco-systems.



Wetlands remove pollutants from water by a complex range of physical, chemical and biological processes and mechanisms. These processes include filtering and settling out of particles, decomposition of organic matter by micro-organisms, the effect of sunlight and oxygen on bacteria, the uptake of nutrients by plants, and the reaction of clay and soil with heavy metals and other chemicals.

Outflows from wetlands are usually of excellent quality, enabling re-use for aquifer recharge and storage, irrigation or commercial uses. The remaining water that flows from wetlands out to sea is sufficiently filtered and cleansed to pose no threat to the marine environment.

An open area in Para Hills, known as The Paddocks, was the first major project, developed as a large parkland and sportsground amenity. The original site was derelict farmland, adversely affected by stormwater from the Para Hills residential area.

With an innovative design, natural creeks, mounds, grassed swales and floodways, ponds and flood storage areas were utilised in a system to contain stormwater and regulate discharge downstream while providing an attractive landscape. The wetlands have been extended several times by constructing banks and weirs.

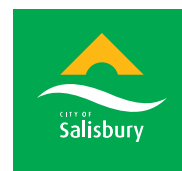
The Greenfields Wetlands along Port Wakefield Road were developed on low-lying saline land. Today, this area of land has become home to 150 species of birds, five species of fish, four species of frog, yabbies, the long-necked tortoise and numerous aquatic and invertebrate fauna. The development includes a nature trail with boardwalks and bird hides, facilitating environmental education and ecotourism.

Salisbury now has more than 30 wetlands covering hundreds of hectares. The biodiversity of these wetlands ensures that natural processes are sustained and that

healthy life for plants, animals and micro-organisms can continue.

The wetlands have also brought about a spectacular new dimension in urban form and residential housing developments.

The transformation has created new levels of community pride and tackled deeply entrenched perceptions of the northern region of Adelaide.



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