

Appendix D: Example of Step 1 - Summary Statement (City of Wanneroo, 2008 - *Local Natural Areas Overview*)

The City of Wanneroo is situated on the Swan Coastal Plain, extending from 10-60km north of Perth, and occupying an area of approximately 687sq. km.

The city's current population is 134,847. The annual growth rate is 7 per cent and it is expected that there will be a population increase of 27 per cent by 2011. With such rapid growth, it is essential that significant natural areas and linkages be identified before development overtakes them.

The land, now within the City of Wanneroo, was originally settled by market gardeners and later by limestone quarriers and their associated lime kilns. The Dongara to Fremantle stock route also ran through Wanneroo, using the lakes as watering holes along the way. These activities have influenced the mosaic of development and remnant bushland seen today.

From the original pockets of habitation in a bush landscape, the City of Wanneroo is rapidly moving towards islands of bushland in a sea of urbanisation. This could easily lead to isolation and genetic stagnation in the remaining natural areas; unless the city's longer-term development plans look to maintaining and reinforcing links between these reserves.

Natural Values

The vegetation complexes and soils within the City of Wanneroo are tied very much to the age of the Aeolian sand dune system on which they occur. The Bassendean Dunes occupy the eastern area of the city, and contain the oldest and most infertile grey sands. This area is fairly flat and low-lying, and contains many round lakes and winter-wet sump lands.

Moving west, the Spearwood Dunes consists of two soil types. Yellow sands over deep limestone form Karrakatta soils. Then as the limestone comes close to the surface, sometimes outcropping, further west, brown to yellow sands form the Cottlesloe soils. The system of linear lakes running north south through the City of Wanneroo occupies ancient swales in the Spearwood Dunes.

The western-most system is the Quindalup Dunes, consisting of young, infertile, white limey sand, usually over older Tamale limestone.

Associated with the lake systems are peaty soils that support the Pinjar and Herdsman vegetation complexes. With south-north changes in climate, associated vegetation assemblages also change with tall trees giving way to smaller mallees. The City of Wanneroo contains large expanses of lakes and wetlands, springs, limestone hills, coastal dunes and cliffs, and various karst forms, all of which help to give the City its character. Preserving representative examples of these landforms for posterity is important, not only for the biodiversity they contain, but also to maintain a sense of place.

The City of Wanneroo currently manages over 100 conservation reserves of varying sizes, including foreshore, wetland and bushland areas. The condition of these

reserves range from degraded to excellent condition. Due to the city's rapid rate of urban expansion, it is expected on a yearly basis, that additional conservation reserves will be created as part of the subdivisional processes and will therefore require management. It is therefore vital that the City have appropriate information available about all conservation reserves highlighting general descriptive factors such as size, vegetation type/condition, local threats and important ecological values in order for these areas to be managed appropriately.

The City of Wanneroo encompasses a wide range of vegetation complexes including; Karrakatta, Bassendean, Cottesloe, Quindalup, Herdsman and Pinjar complexes. At both a local and regional level, certain vegetation complexes within the city are of high significance. Within the extents of the area, special ecological attributes are present, including; Declared Rare Flora and Fauna, Threatened Ecological Communities and significant flora and fauna present over a range of different reserves.

Aboriginal Sites

There are artefact sites and landforms significant to dreamtime stories throughout the City of Wanneroo. The system of larger lakes and their surrounds were used in pre-European times for hunting and camping. Surrounding landforms, caves, scarred trees and hills became culturally significant over thousands of years as part of Nyoongar mythology. Where possible, such areas should be included within parks and reserves so that they are kept in their original natural context.

European History

Reminders of past use can be found throughout much of Wanneroo, from original settlers' houses and remnant orchard trees to lime kilns and quarries. All of these give an insight into the evolution of the city, and provide a valuable link to the past. Their protection and management often goes hand-in-hand with that of the surrounding reserve.

Social Values

Bushlands, wetlands and beaches are very much a part of the social fabric of Wanneroo. They are recreation resources, places to commune with nature, places of discovery and links to the natural environment. In addition, these natural areas should be utilised as a learning resource by educational institutions to further promote the value of ecological areas.

Management Framework

Where management plans for reserves have been created, these documents are utilised for day-to-day maintenance and long-term management of the particular reserve. Vesting of natural areas currently varies from recreation, to passive-recreation, to conservation.

Where management plans have not been created, the Bushland Assessment 2003 (City of Wanneroo) document, created using the Local government Biodiversity Planning Guidelines, is used. This document highlights threats to reserves, describes vegetation types and condition (at time of assessment), and includes various details pertaining to the reserves, e.g. location and size. This document also

prioritises all City of Wanneroo conservation reserves and therefore management practises are carried out using this prioritisation process.

Key threats to natural areas within the City of Wanneroo include: vandalism, off-road vehicles and dirt bikes, invasion of exotic weed species, frequent fire regimes, dumping of rubbish/household waste and garden materials and stormwater run-off into wetland areas. In addition, changing climatic condition and reduced rainfall may play a part in the reduction of biodiversity of conservation areas.

A dieback strategy document has been prepared for the Koondoola Regional Reserve; these strategies were incorporated into the management plan which was reviewed and accepted in 2008.

Annual budget allocation for conservation areas is divided into two areas:

1. Capital works – new projects in conservation areas; and
2. Conservation Maintenance – ongoing management/day-to-day activities and ongoing maintenance.

Generally, capital works projects are carried out by contractors; however this is dependant upon City of Wanneroo maintenance staff schedules. Planting events are generally supervised by City of Wanneroo staff (sometimes contractors) but attended by volunteers and friends groups. The ongoing management of conservation areas is conducted by City of Wanneroo conservation maintenance staff; however contractors are engaged by conservation maintenance for some works including fence repairs, weed management and fire breaks.

Recently, (2008) the City of Wanneroo finalised two Coastwest grants for works in the Yanchep/Two Rocks area:

1. Dewars Track

Major informal access tracks have been upgraded to provide formal paths through the foreshore reserve. Fencing has been installed along the path, providing formal access to the beach and restricting unauthorised vehicle access to the project area. Volunteers have participated in community information sessions (to raise awareness about the project) and site meetings to discuss the proposed works. In addition brushing materials were delivered to the site by a contractor and volunteers spent a day spreading brush along exposed areas to prevent wind erosion and encourage natural revegetation of the dunes.

2. Claytons Beach

Fencing was installed to upgrade carpark perimeter fencing. Conservation and identification signage was upgraded. Wind-break fencing was also installed to stabilise eroded dune areas. Site maintenance was carried out to remove sand that had blown over the car park from the eroded dune area. Rehabilitation which occurred within the foreshore area included weed control, jute mat installation and planting of local provenance species.