Roadside Vegetation and Conservation Values in the Shire of Denmark



Photos by: K. Payne, RCC

November 2011



Roadsides - The vital link

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Survey of Roadside Conservation Values in the Shire of Denmark

Executive Summary

This report provides an overview of the conservation status of roadside remnant vegetation in the Shire of Denmark. The report primarily provides detailed results of the roadside survey and is accompanied by management recommendations. It also briefly describes the natural environment in Denmark, legislative considerations and threats to conservation values.

Aware of the need to conserve roadside remnants, the Shire of Denmark and local community members liaised with the Roadside Conservation Committee (RCC) to survey roadsides in their Shire. Surveys to assess the conservation values of roadside remnants were conducted between October 2010 and May 2011. Approximately, 64.5% of the Shire's 680km of rural roadsides were assessed by the RCC for their conservation status and maps were produced via a Geographic Information System (GIS). This represents the majority of non-urban roads. Roadside locations of six nominated weeds were also recorded and mapped onto separate clear overlays.

The results of the survey indicated that high conservation value roadsides covered of 61% of the roadsides surveyed in the Shire, with medium-high conservation value roadsides accounting for 19% Medium-low and low conservation value roadsides occupied 8% and 12%, respectively. A more detailed analysis of results is presented in Part C of this report.

It is envisaged that the primary purpose of the roadside survey data and Roadside Conservation Value (RCV) map will be for use by Shire and community groups as a management and planning tool. Applications may range from prioritising work programs to formulating management strategies. Past experience has shown that this document and the accompanying maps are valuable in assisting with:

- formulating a roadside vegetation management plan for road maintenance work;
- identifying degraded areas for strategic rehabilitation or specific management techniques and weed control programs;
- re-establishing habitat linkages throughout the Shire's overall conservation network;
- developing regional or district fire management plans;
- identifying potential tourist routes, i.e. roads with high conservation value would provide visitors with an insight into the remnant vegetation of the district; and
- incorporating into Landcare or similar projects for 'whole of' landscape projects.

Successive surveys of some Shires have revealed an alarming decline in the conservation status of many roadside reserves. In some cases the conservation value has declined at a rate of approximately 10% in 9 years. This trend indicates that without appropriate protection and management, roadside reserves will become veritable biological wastelands within the near future. However, proactive and innovative management of roadside vegetation has the potential to abate and reverse this general decline. Opportunities exist for the Shire of Denmark to utilise the RCV map in many facets of its Landcare, tourism, road maintenance operations and Natural Resource Management (NRM) strategy documents. In addition, the RCC is available to continue to provide assistance with the development of roadside vegetation management plans and associated documents.

1

PART A

OVERVIEW OF
ROADSIDE
CONSERVATION

1.0 Why is Roadside Vegetation Important?

Since the settlement of Western Australia by Europeans, large areas of native vegetation in the south west of the state have been cleared for agriculture, settlements, and other development. The fragmentation of the more or less continuous expanse of native vegetation communities by clearing has resulted in a mosaic of

man-made biogeographical islands of small native vegetation remnants.

The flora and fauna in these areas are in jeopardy due to limited resources, increased disease risk and reduced genetic diversity caused by a diminishing gene pool. Some habitat fragments may be too small to provide the requirements for even a small population; therefore it is essential to their survival that they have a means of dispersing throughout the landscape. The presence of native vegetation along roadsides often fulfils an important role in alleviating this isolation effect by providing connectivity between bush remnants. While many roadside reserves are inadequate in size to support many plant and animal communities, they are integral in providing connections between larger areas of potentially more suitable remnant patches. It is therefore important that all native vegetation is protected regardless of the apparent conservation value it contains. It is important to acknowledge that even degraded roadsides have the ability to act as corridors for the dispersal of a variety of fauna.



Tree hollows are of vital importance to breeding birds.
Photo by L. McMahon, Birds Australia

Other important values of transport corridor remnants are that they:

- are often the only remaining example of original vegetation within extensively cleared areas;
- often contain rare and endangered plants and animals, such that roadside plants represent more than 20% of the known populations of Threatened Flora and three species are known only to exist in roadside populations (Source: DEC's DEFL database March 2011);
- provide the basis for our important wildflower tourism industry, the aesthetic appeal of well-maintained roadsides potentially improving local tourism and proving a sense of place;
- often contain sites of Aboriginal /European historic or cultural significance;
- provide windbreaks and stock shelter areas for adjoining farmland by helping to stabilise temperature and reduce evaporation;
- assist with erosion and salinity control, in both the land adjoining the road reserve and further afield; and
- provide a valuable source of seed for regeneration projects, especially shrub species, as clearing and grazing beneath farm trees often removes this layer. <u>Approval of the local Shire and a</u>



Flora Roads are high conservation value roadside remnants. Photo C. Wilson.

<u>Department of Environment and Conservation (DEC) permit are required prior to collection</u>. Guidelines for seed and timber harvesting can be found in Appendix 7.

2.0 What are the Threats?

2.1 Lack of Awareness

The general decline of the roadside environment can, in many instances, be attributed to the lack of awareness of the functional and conservation value of the roadside remnants, both by the general community and those who work in the road reserve environment. The lack of awareness of the roadside vegetation's values means that those connected with the roadside are unable to modify their actions to minimise their impact. As a result, activities such as road maintenance and the use of fire, can act as a catalyst for decline in environmental quality.

2.2 Roadside Clearing

Western Australia's agricultural region, also known as the Intensive Land-use Zone (ILZ), covers an area of approximately 24,834,575 ha, of which only 7,531,044 ha (30.3%) is covered by the original native vegetation. Of the 86 rural Local Government Authorities (LGA's) in this zone, 10 have less than 10% of the original remnant vegetation and a further 38 LGA's have more than 10% but less than 30% of native vegetation extent (DAFWA, 2011).



Care must be taken when clearing to ensure large trees are not damaged and that the clearing is actually necessary and that the necessary permits are obtained.

Photos: RCC



Road and roadside vegetation management practices have a significant impact on the conservation of roadside vegetation. The decision to minimise clearing for construction and maintenance, and avoid systematic and indiscriminate clearing which creates irreversible damage, will enable roadside vegetation to continue to act as a biological corridor and habitat.

Due to the movement and disturbance of soil, all road construction and maintenance activities have the potential to introduce and spread weeds and dieback, which have a devastating impact on native vegetation.

It is thus important to work from "clean" areas to "dirty" – that is, from areas that are weed and/or dieback free to those areas in which weeds and/or dieback exist. It is also important to clean down machinery before moving between work sites.

In 2004, amendments to the *Environmental Protection Act* 1986 (EP Act) put in place a permit application process designed to assess proposed vegetation clearing based upon a number of clearing principles which ensure ecological, conservation and land degradation issues are considered. Under the EP Act clearing native vegetation requires a permit unless it is for exempt purposes (see pg 10-11). These amendments are designed to provide improved protection for



Creative solutions including creating passing areas rather than widening a whole road.

Photo C. Macneall, RCC

native vegetation, maintain biodiversity and allow for some incidental clearing activities to continue; such as day-to-day farming practices, without the need for a permit.

2.3 Fire

Although Western Australia's flora and fauna have evolved with a tolerance to pre-European fire regimes, these are generally not present today. Fire in transport corridors will inevitably alter the native vegetation; however the extent of changes is dependent on a number of factors such as:

- species present;
- intensity of fire;
- frequency of fire; and
- seasonality of the fire.

The RCC's policy on fire management is:

roadside burning should not take place without the consent of the managing authority;



Controlled burning of roadside vegetation should result in a mosaic of burnt & unburnt patches

Photo: FESA

- Before a decision is made to burn a road verge, the impact on natural, cultural and landscape values should be carefully considered. Photo D. Lamont
- Local Government Authorities should adopt by-laws to control roadside burning;
- roadside burning should be planned as part of a total Shire/area Fire Management Plan;
- only one side of a road should be burnt in any one year; this will ensure habitat retention for associated fauna and also retention of some of the scenic values associated with the road.
- when designing a Fire Management Plan, the two principles which must be kept in mind are the ecological management of vegetation and the abatement of fire hazard;
- no firebreaks within the Road Reserve should be permitted unless the width of the roadside vegetation strip is greater than 20m;
- a firebreak on any road reserve should be permitted only when, in the opinion of the road manager, one is necessary for the protection of the roadside vegetation. The road manager shall specify the maximum width to which the break may be constructed; and
- in the case of any dispute concerning roadside fire management, the Fire and Emergency Services Authority (FESA) should be called in to arbitrate.

Before any decision is made to burn a road verge, particularly if threatened flora is present, the proponent should be aware of all values present and the impact the fire will have. It is illegal to burn roadsides where Threatened Flora is present, without written permission from the Minister for the Environment. Fire can also be particularly destructive to heritage sites, whether they are of Aboriginal or European origin.

More information about fire management in roadsides can be found in the RCC's recently released publication, *Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines*.



Burnt roadsides showing signs of regeneration of natives and weeds including African lovegrass (below). Follow up weed control needs to occur after burning to ensure flammable weeds don't establish after burning.



2.4 Weeds

Weeds are generally disturbance opportunists and as such the road verge often provides a vacant niche which is easily colonised. Their establishment can impinge on the survival of existing native plants, increase flammability of the vegetation and interfere with the engineering structure of the road. The effect of weed infestations on native plant populations can be severe, often with flow on effects for native fauna such as diminished habitat or food resources.

Once weeds become established in an area, they become a long-term management issue, costing considerable resources to control or eradicate. The roadside survey recorded populations of six significant

Eragrostis curvula Photos, J. Dodd, L. Fontanini & R. Randa

African Lovegrass is a widespread and serious roadside weed. It forms dense monocultures, creating large fuel loads and a fire hazard. Burning results in increased regeneration of this weed.

Image used with permission of the WA Herbarium, DEC. (http://florabase.dec.wa.gov.au/browse/profile/376. Accessed October 2011.

weeds, and their locations were mapped by the RCC onto clear overlays. The six nominated weeds were:

- African Lovegrass (Eragrostis curvula)
- Watsonia (Watsonia sp.)
- Pittosporum (*Pittosporum undulatum*)
- Victorian Tea Tree (Leptospermum laevigatum)
- Sydney Golden Wattle (Acacia longifolia)
- Taylorina (Psoralea pinnata)

Roadside populations of these weeds can be observed on the weed overlays provided with the Denmark Roadside Conservation Value map (2011). The Roadside Conservation Value map and weed overlays will assist the Shire and community in planning, budgeting and coordinating strategic weed control projects. Further information on the presence of these nominated weeds is presented in Part C of this report.



Pittosporum is a native to eastern Australia.

A tree which grows up to 5m high.

Dispersed by birds, possums and garden refuse. Fire will kill most adult plants.

A garden escape and was used in revegetation.

Photo used with permission of the WA Herbarium, DEC. http://florabase.dec.wa.gov.au/browse/profile/16322. Accessed October 2011.



Watsonia is an invasive weed spread by corms & seed, prevalent in damp areas.

It grows to 2.5m high and flowers from September to December.

A garden escape brought in from South Africa.

It generally survives and flowers prolifically after fire.

Photo used with the permission of the WA Herbarium, DEC http://florabase.dec.wa.gov.au/browse/profile/18108. Accessed October 2011





Victorian Tea Tree or Coast Teatree is a Garden escape originally planted for dune stabilization and for windbreaks. It is now a major bushland weed which is spreading rapidly along roadsides between Jurien Bay and Esperance.

Photo used with permission of the WA Herbarium, DEC; http://florabase.dec.wa.gov.au/browse/profile/5850 Accessed October 2011



Sydney Golden Wattle is a garden escape which now grows on roadsides, creeklines, swamps and bushland between Manjimup and Albany. It is a dense bushy shrub or small tree up to 10m with cylindrical yellow flower spikes.

Photo used with permission of the WA Herbarium, DEC. http://florabase.dec.wa.gov.au/browse/profile/17861. Accessed October 2011.



Taylorina, also known as African Scurf pea, has become a dominant weed along roadsides. It was introduced from southern Africa as a source of honey for bees. (Hussey et al, 2007)

Photo used with permission of the WA Herbarium, DEC. http://florabase.dec.wa.gov.au/browse/profile/4155 Accessed October 2011

2.5 Dieback (Phytophthora cinnamomi)

One of the major threats to the biodiversity of Western Australia's ecosystems is dieback disease. Approximately one third of the native flora in the south-western part of WA is susceptible to attack. It is a major issue on the south coast and roadsides provide an avenue for its spread. Phytophthora dieback disease is caused by the microscopic soil-borne pathogen *Phytophthora cinnamomi*. From the soil it feeds on the roots of plants causing the roots to rot in susceptible species. Plant death occurs because plants cannot take up the water and nutrients they need for survival. Infected plants often appear to be dying from drought conditions.

Dieback can cause:

- Significant loss of biodiversity including loss of key understorey species and disruption to woodland vegetation structure;
- loss of habitat and food sources for birds, small mammals and insects;
- extinctions of threatened plant and animal species;
- disruption of ecological function /change in ecosystem cycles;
- increased fire risk;
- altered hydrology and increased erosion; and
- the increased dominance of resistant plants such as grasses, rushes and sedges.



Recent infestation: Banksia and Xanthorrhoea (grass trees) species are very susceptible which suggests that the infestation has just reached this area. Close by is a firebreak and it is very likely that the spread of the infestation was accelerated by moving dirt along the firebreak Photo: J. Brooker, Project Dieback

In field studies of south western plant communities, the families with the highest proportion of susceptible species were **Proteaceae**, such as Banksia, Grevillea, Hakea (92 per cent), **Ericaceae** (Heath family) (80 per cent), **Fabaceae** (Pea family) (57 per cent) and **Myrtaceae**, such as Eucalyptus, Myrtles and Melaleuca (16 per cent) (DEC, 2011, http://www.dec.wa.gov.au/content/view/213/548/1/2/)

The pathogen is spread through the movement of infested soil and mud, especially by vehicles and footwear. It also moves in free water and via root to root contact between plants.

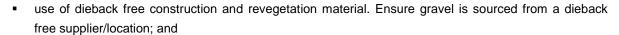
Dieback disease does not have a cure. However, through research, it has been shown plants can improve their resistance to the pathogen by spraying or injecting plants with the fungicide, Phosphite (a derivative of phosphorus acid).

The most cost effective way of managing dieback is by limiting the spread of the disease rather than managing the impacts of the pathogen once it is introduced into a bushland.

Management practices include:

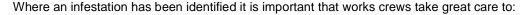
- information signs and education;
- seasonal and permanent road and trail closures;
- vehicle washdown using established cleaning stations to avoid transport of contaminated soil and vegetative material. Please note: Dry cleaning (cleaning vehicles/machinery when dry) is preferable to wash-down;
- clean any equipment including footware and tools that comes in contact with soil or plant material;







(DEC, 2011, http://www.dec.wa.gov.au/content/view/5729/2305/)



- schedule activities for low rainfall months/plan activity for dry soil conditions;
- grade toward the infestation area (rather than away from it);
- lift the blade frequently to minimise the distance that dirt is carried;
- clean (dry clean or wash down) the blade (and the whole machine) before leaving the infested area;
 and
- a little time and care taken can ensure the disease is not spread to another area.

It is also important to note that where dieback free areas are mapped, emphasis should be given to the protection of these areas.

- Plan the activity for dry soil conditions only.
- Start clean, stay clean clean machinery before arriving/working in these areas. This also includes footwear or any equipment which comes in contact with any soil or plant material.

Dieback tends to occur in the Walpole Wilderness in low lying areas following drainage lines, flats, swamps etc. Upland areas tend to be dieback free and it important to be aware of this when moving vehicles/equipment from lowland areas to upland (e.g. hills) potentially spreading infection. When moving through the landscape you can stay low or stay high in the profile or clean when moving from low to high areas.

Cleaning/disinfecting also reduces other biosecurity threats such as weeds so it has multiple benefits.



Roadside dieback front - Conspicuous Beach Rd. Photo: E. Edmonds, South Coast NRM

Based on the roadside surveys conducted in 2010 there are 21 sections of roads suspected of dieback in the Shire of Denmark. These sections are on the following roads:

Barnes Rd, Board Rd, Brenton Rd, Dingo Flat Rd, Gully Rd, Happy Valley Rd, Harewood Rd, Hazelvale Rd, Lights Rd, Mclean Rd, Nunn Rd, Randall Rd, Warham Rd and Woodward Hts.

Testing would be needed to confirm whether or not these are actually dieback and there may be infestations on other roads which were not noted. It would be best to liaise with local NRM Dieback Project Officer's and the Dieback Working Group.

More information about managing dieback can be obtained from the Dieback Working Group website www.dwg.org.au where you can also download the 'Managing Phytophthora Dieback: Guidelines for Local Government'.



3.0 Legislative Requirements

Uncertainty often exists in the minds of many with regard to the 'ownership', control and management of 'the roadside'. This problem is also exacerbated by the multitude of legislative reference to activities within a transport corridor.

The DEC has the legislative responsibility to manage and protect all native flora and fauna in Western Australia. It is important to note that all native flora and fauna is protected under provisions of the *Wildlife Conservation Act* 1950 and *Environmental Protection Act* 1986 and cannot be taken unless it is taken in a lawful manner. In addition to the general provisions relating to protected flora under the *Wildlife Conservation Act*, special protection is afforded to flora that is declared as rare or threatened under Section 23F of the *Wildlife Conservation Act*.

The legislation pertaining to the management of road reserves is complex and includes those listed below.

State legislation:

- Aboriginal Heritage Act 1972
- Agriculture and Related Resources Protection Act 1976
- Bush Fires Act 1954
- Conservation and Land Management Act 1984
- Environmental Protection Act 1986
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Heritage of WA Act 1990
- Land Administration Act 1997
- Local Government Act 1995
- Main Roads Act 1930
- Mining Act 1978
- Soil and Land Conservation Act 1945
- State Energy Commission Supply Act 1979
- Water Authority Act 1984
- Wildlife Conservation Act 1950, 1979

Commonwealth legislation:

- Environment Protection and Biodiversity Conservation Act 1999

Legalisation introduced under the *Environmental Protection Act 1986* specifies that all clearing of native vegetation requires a permit, unless it is for an exempt purpose. Schedule 6 of the EP Act and the Environmental *Protection (Clearing of Native Vegetation) Regulations* 2004 detail these requirements. Clearing applications are assessed against ten clearing principles, which incorporate the:

- biological value of the remnant vegetation;
- potential impact on wetlands, water sources and drainage;
- existence of rare flora and threatened ecological communities; and
- land degradation impacts.

This assessment process is designed to provide a more comprehensive and stringent land clearing control system. There are two land clearing permits available: an area permit; and a purpose permit. For example, where clearing is for a once-off clearing event such as pasture clearing or an agricultural development, an area permit is required. Where ongoing clearing is necessary for a specific purpose, such as road widening programs, a purpose permit is needed. Shire road maintenance activities are exempt, to the width and height previously legally cleared for that purpose in the last 10 years (refer to Schedule 2 of the *Environmental Protection (Clearing of Native Vegetation) Regulations* 2004).

A clearing permit is required for road upgrades. More information can be found on DEC's website www.dec.wa.gov.au/nvc or contact DEC's Native Vegetation Conservation Branch on 9219 8744.

It is recommended that a precautionary approach be taken when working within roadsides and that the relevant authority be contacted if there is any doubt about the management or protection of heritage or conservation values present in the roadsides.

4.0 Environmentally Sensitive Areas

An Environmentally Sensitive Area (ESA) is an area that requires special protection. Some of the reasons include:

- protection of rare or threatened species of native plants;
- protection of wetlands and water courses;
- protection of sites that have other high conservation, scientific or aesthetic values; and/or
- protection of Aboriginal or European cultural sites.

Environmentally Sensitive Areas can be delineated by the use of site markers. The RCC publication

Guidelines for Managing Special Environmental Areas in Transport Corridors has advice on the design and placement of ESA markers. Workers who come across an ESA marker in the field should not disturb the area between the markers unless specifically instructed. If in doubt, the Works Supervisor, Shire Engineer or CEO should be contacted. Western Power and Brookfield Rail also have systems for marking sites near power or rail lines.

To ensure that knowledge of rare flora and other sites does not get lost due, perhaps, to staff changes, is it recommended that the Shire establish an *Environmentally Sensitive Area Register*. This should outline any special treatment that the site should receive and be consulted prior to any work being initiated in the area. This will ensure that inadvertent damage does not occur.

During the survey, three roadsides with ESA markers in the Shire of Denmark were found, these roads include:

- Denmark Mt Barker Road
- McIntosh Road
- Vigus Road



Roadside ESA markers are highly visible. Photo by K. Jackson

Local Government's are encouraged to permanently mark ESA's to prevent inadvertent damage to rare flora or other values being protected. Markers of a uniform shape and colour will make recognition easier for other authorities using road reserves.

5.0 Flora Roads

A Flora Road is one which has special conservation value because of the vegetation contained within the road reserve. The managing authority may decide to declare a Flora Road based on the results of survey of roadside conservation value the recommendation of the RCC. The RCC has prepared Guidelines for the Nomination and Management of Flora Roads (Appendix 8). The Flora Road signs (provided by the RCC) draw the attention of both the tourist and those working in the road reserve to the roadside flora, indicating that it is special and worthy of protection. The program seeks to raise the profile of roadsides within both the community and road management authorities.



Roadsides are one of the most accessible places for tourists to view wildflowers. Photo: K Payne, RCC

There are currently four Flora Roads which have been recently declared within the Shire of Denmark. The roadside survey and the RCV map also highlighted a number of other roadsides that have the potential to be declared as Flora Roads. These and other roads may be investigated further to see if they warrant a declaration as a Flora Road (see Part C of this report).

In order to plan roadworks so that important areas of roadside vegetation are not disturbed, road managers should be aware of these areas. To ensure this is not overlooked it is suggested that

Environmental Area Register.

Flora Roads also provide habitat for fauna. Photo: K. Payne, RCC.

Attractive roadsides are an important focus in Western Australia, the "Wildflower State". Flora Roads will by their very nature be attractive to tourists and would often be suitable as part of a tourist drive network. Consideration should be given to:

- promoting the road by means of a small brochure or booklet;
- showing all Flora Roads on a map of the region or State; and
- using specially designed signs to delineate the Flora Road section (provided by the RCC).



- Tindale Road and pea flowers on Ficifolia Road Photos: K. Pavne. RCC & K. Gillies

PART B

THE NATURAL ENVIRONMENT IN DENMARK

1.0 Flora

On a global scale Western Australia has almost ten times the amount of vascular plant varieties than countries such as Great Britain. In fact, Western Australia has some 4.8% of the 250,000 known vascular flora present on Earth. Western Australian flora is also unique, with the majority of species being endemic: That is, found nowhere else in the world. Up to 75% of the 6,000 species in the south west, are endemic.

The WA Herbarium has recorded over 1600 species of native plants from the Shire of Denmark. The most prolific genera are Proteaceae (103 species), Orchidaceae (132 spp.), Myrtaceae (119 spp.) and Fabaceae (177 spp.). The complete list of recorded flora can be seen in Appendix 4 of this report.

2.0 Threatened Flora (Declared Rare Flora)

Threatened Flora species, or populations, are of great conservation significance and should therefore be treated with special care when road and utility service, construction or maintenance is undertaken. Populations of Threatened Flora along roadsides are designated ESA's and should be delineated by yellow markers. It is the responsibility of the road manager to ensure these markers are installed. The RCC suggests using the publication *Guidelines for Managing Special Environmental Areas in Transport Corridors* as a guideline for managing these sites.

As of January 2011, there are 10 species of Threatened Flora and 99 species of Priority Flora throughout the Shire of Denmark. 26 Priority species are found in 68 roadside locations in the Shire, these are:



Threatened Flora sites should be clearly marked with these yellow posts.

Photo: RCC

Priority Flora

- Alexgeorgea ganopoda Priority 3
- Amperea protensa P3
- Andersonia amabile P3
- Andersonia auriculata P3
- Andersonia sp. Mitchell River (B.G. Hammersley 925) P3
- Aotus franklandii P2 (only occurs on roadside)
- Boronia virgata P4
- Borya longiscapa P3
- Daviesia mesophylla P2
- Drosera binata P2
- Gastrolobium elegans P2
- Gonocarpus simplex P3
- Goodenia sp. South Coast (A.R. Annels ARA1846) P3
- Juncus meianthus P2
- Lambertia rariflora subsp. lutea P3



Lambertia rariflora subsp. lutea

- Open shrub or small tree; grows up to 10m high.
- Flowers are yellow or orange from November to April.
- Priority 3 species.

DEC,FloraBase

http://florabase.dec.wa.gov.au/browse/profile/16872. Used with the permission of the Western Australian Herbarium, DEC. Accessed January 2011.

- Lasiopetalum sp. Denmark (B.G. Hammersley 2012) P3
- Laxmannia jamesii P4
- Lysinema lasianthum P4
- Marianthus sylvaticus P3
- Meeboldina crassipes P3
- Meeboldina thysanantha P3
- Ornduffia submersa P4
- Rulingia apella P1 (only occurs on roadside)
- Sphenotoma parviflora P3
- Spyridium riparium P2
- Stylidium leeuwinense P3



Spyridium riparium

- Priority 2 species.
- Erect shrub, Grows to between 0.8 and 1.5 m high.
- White/cream flowers between July and October.
- Found on sandy or gravelly soils over laterite, river banks and slopes.

DEC, FloraBase (http://florabase.dec.wa.gov.au/browse/profile/14813)
Used with the permission of the Western Australian Herbarium, DEC.
Accessed October 2011. Photos: A.D Crawford.

For definitions of Threatened and Priority Flora refer to Appendix 3. For more detailed information regarding Threatened and priority flora in the Shire of Denmark, contact the DEC Threatened Flora Administrative Officer in Species and Communities Branch at Kensington flora.data@dec.wa.gov.au or the Conservation Officer (Flora) for the Warren Region, Frankland District DEC office on 9849 0400. In addition, the information provided in this report will not remain current, thus it is important that the Shire check with DEC periodically to avoid inadvertent damage to newly registered populations of Threatened. If roadworks are to be carried out near known Threatened sites, it is advisable to contact the DEC at least six weeks in advance.



Stylidium leeuwinense

- Erect perennial, herb,
- \bullet Grows to between 0.15 and 0.6m high.
- Pink flowers from February to May.
- Found in heath sedgeland or low woodland.
- It is a Priority 4 species.

DEC, FloraBase (http://florabase.dec.wa.gov.au/browse/profile/17411). Used with the permission of the Western Australian Herbarium, DEC Accessed November 2011.

3.0 Fauna

The Western Australian Museum records approximately 282 species of fauna from the Denmark area (Appendix 5). WA Museum fauna records comprise specimen records, museum collections and observations from 1850 to present and therefore it is intended to act only as a general representation of the fauna in the

area. Of the fauna species recorded in the Denmark area, there were 193 bird, 14 amphibia, 36 mammal, 5 fish, 8 invertebrate and 26 reptile species.

Many fauna species, particularly small birds need continuous corridors of dense vegetation to move throughout the landscape. Roadsides therefore are of particular importance to avifauna because they can contain the only continuous linear vegetation connection in some areas.

The *Wildlife Conservation Act* 1950 provides for native fauna (and flora) to be specially protected where they are under an identifiable threat of extinction, and as such, are considered to be "Threatened". Based on distributional data from the DEC, 46 species of threatened and priority fauna have been recorded or sighted throughout the Shire of Denmark, and these are listed below.

Amphibian

Spicospina flammocaerulea (Sunset Frog) T

Bird

- Ardeotis australis (Australian Bustard) P4
- Atrichornis clamosus (Noisy Scrub-bird) T
- Botaurus poiciloptilus (Australasian Bittern) T
- Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black-Cockatoo) T
- Calyptorhynchus baudinii (Baudin's Cockatoo) T
- Calyptorhynchus latirostris (Carnaby's Cockatoo) T
- Charadrius rubricollis (Hooded Plover) P4
- Dasyornis longirostris (Western Bristlebird) T
- Diomedea melanophris subsp. melanophris T
- Falco peregrinus (Peregrine Falcon) \$
- Falco peregrinus subsp. macropus \$
- Falcunculus frontatus subsp. leucogaster P4
- Ixobrychus flavicollis subsp. australis P3
- Leipoa ocellata (Malleefowl) T
- Pezoporus wallicus subsp. flaviventrus T
- Pomatostomus superciliosus subsp. ashbyi (Whitebrowed Babbler) (western wheatbelt))P4
- Psophodes nigrogularis subsp. nigrogularis T
- Thalassarche chlororhynchos (Atlantic Yellow-nosed Albatross) T



Baudin's Black-Cockatoo is almost exclusively found in the south-west of WA Used with the permission of the WA Herbarium, DEC http://florabase.calm.wa.gov.au/help/photos#reuse



Red tailed black cockatoo © Babs & Bert Wells/DEC



Malleefowl
© Babs & Bert Wells/DEC

Fish

- Galaxias truttaceus subsp. hesperius (Western Trout Minnow) T
- Galaxiella munda (Western Mud Minnow) T
- Galaxiella nigrostriata (Black-stripe Minnow) P3
- Nannatherina balstoni (Balston's Pygmy Perch) T

Invertebrate

- Austrarchaea mainae (Western Archaeid Spider) T
- Austromerope poultoni (Scorpion fly) P2
- Cynotelopus notablis (WA Pill Millipede) T
- Engaewa walpolea (Walpole Burrowing Crayfish) T
- Geotria australis (Pouched Lamprey) P1
- Moggridgea tingle (Tingle Trapdoor Spider) T
- Westralunio carteri P4

Mammal

- Arctocephalus forsteri (New Zealand Fur Seal) \$
- Bettongia penicillata subsp. ogilbyi (Brush-tailed Bettong, Woylie) T
- Dasyurus geoffroii (Western Quoll, Chuditch) T
- Eubalaena australis (Southern Right Whale) T
- Falsistrellus mackenziei (Western False Pipistrelle) P4
- Hydromys chrysogaster (Water-rat) P4
- Isoodon obesulus subsp. fusciventer (Southern Brown Bandicoot, Quenda) P5
- Macropus irma (Western Brush Wallaby) P4
- Myrmecobius fasciatus (Numbat, Walpurti) T
- Neophoca cinerea (Australian Sea Lion) S
- Phascogale tapoatafa subsp. ssp. (WAM M434) (Brush-tailed Phascogale, Wambenger)T
- Physeter macrocephalus (Sperm Whale) P4
- Pseudocheirus occidentalis (Western Ringtail Possum)T
- Setonix brachyurus (Quokka) T

Reptile

- Caretta caretta (Loggerhead Turtle) T
- Elapognathus minor (Short-nosed Snake) P2

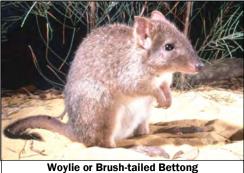
Conservation Status

T - Rare or likely to become extinct

S - Other specially protected fauna P1 – P5: Priority 1 – Priority 5



Brush-tailed phascogale © Babs & Bert Wells/DEC

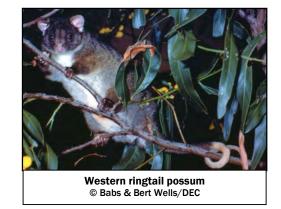


© Babs & Bert Wells/DEC



Chudich & juveniles © Babs & Bert Wells/DEC





Survey of Roadside Conservation Values in the Shire of Denmark

4.0 Remnant Vegetation Cover

77.5% of the original native vegetation remains in the Shire of Denmark and this is located in a variety of tenures from nature reserves to privately owned land (Table 1a). While this is higher than some other shires, the remaining native vegetation can easily be further depleted if proactive measures are not taken to manage this priceless resource.



Table 1a. Remnant vegetation remaining in the agricultural areas of the Shire of Denmark and surrounding Shires (Shepherd, Beeston and Hopkins, 2009).

Shire	Total Area	Area Cleared	Vegetation Cover Remaining	
	(ha)	(ha)	(ha)	(%)
Denmark	190,534	42,829	147,705	77.52
Manjimup	697,371	108,122	589,249	84.5
Plantagenet	487,974	260,215	227,759	46.67
Albany	431,375	270,000	161,375	37.41

The continued presence of the flora and fauna living in these fragmented remnants is dependant on connectivity throughout the landscape. This enables access to habitat and food resources essential for the survival of species and the overall biodiversity of the region. In many situations remnant native vegetation in transport corridors is of vital importance as it provides the only continuous link throughout the landscape.



Survey of Roadside Conservation Values in the Shire of Denmark



4.1 Denmark Vegetation Associations

The vegetation associations known from the Shire of Denmark, noted in Table 1b, provide an indication of the assemblages of native vegetation present prior to European settlement. It should be noted that these assemblages are indicative of the shire per se and not specifically representative of roadside remnants

Table 1b. Vegetation types and percentages remaining in the Shire of Denmark (Shepherd, Beeston and Hopkins, 2009).

Denmark Vegetation Association Types	% Remaining
Tall forest; karri (Eucalyptus diverscolor) (1)	55.34
Medium forest; jarrah-marri (3)	82.25
Low forest; jarrah (14)	92.45
Low woodland; Agonis flexuosa (22)	100.00
Low woodland; jarrah-banksia (23)	92.18
Low woodland; paperbark (Melaleuca sp.) (27)	84.60
Shrublands; teatree thicket (37)	77.09
Shrublands; mixed heath (49)	92.31
Sedgeland; reed swamps, occasionally with heath (51)	56.79
Bare areas; salt lakes (125)	5.24
Bare areas; freshwater lakes (126)	21.63
Bare areas; rock outcrops (128)	100.00
Bare areas; drift sand (129)	66.83
Shrublands; Acacia scrub-heath (unknown spp.) (423)	77.17
Mosaic: Medium forest; jarrah-marri / Low forest; jarrah (969)	46.25
Low forest; teatree & casuarinas (977)	78.33
Low forest: peppermint (Agonis flexuosa) (990)	80.51
Shrublands; peppermint scrub, Agonis flexuosa (1109)	98.36
Shrublands; Jacksonia horrida heath (1113)	85.69
Tall forest; karri & red tingle (Eucalyptus jacksonii) (1130)	64.32
Medium woodland; jarrah (south coast) (1134)	100.00
Tall forest; karri & yellow tingle (Eucalyptus guilfoyleii) (1139)	96.98
Tall forest; karri & Rates tingle (Eucalyptus brevostylis) (1140)	100.00
Tall forest; karri, red tingle & yellow tingle (1150)	93.12
Medium forest; jarrah & red tingle (1151)	94.37
Medium forest; jarrah & yellow tingle (1152)	97.72
Medium forest; jarrah & Rates tingle (1153)	88.34
Sedgeland; sedges with low tree savanna woodland; paperbarks over & various sedges (2051)	98.56

Note: Numbers in brackets relate to the vegetation associations listed in Shephard (2009)

Figure 8 in Part C of this report shows the vegetation types recorded along the Shire of Denmark roadsides during the survey.

PART C

ROADSIDE
SURVEYS IN THE
SHIRE OF DENMARK

1.0 Introduction

The roadside survey and mapping program was developed to provide a method of readily determining the conservation status of roadsides. Using this method, community volunteers are able to participate in a 'snapshot' survey of roadside vegetation to identify a range of attributes that, when combined, give an overall indication of the conservation status of the vegetation.

Usually the survey is undertaken by a group of local volunteers, who, aided by their knowledge of the area, are able to provide an accurate and cost effective method of data collection. Community participation also ensures a sense of 'ownership' of the end product, which increases the likelihood of its acceptance and use by the local community and road managers.

The majority (438.7km, or 64.5%) of the Shire of Denmark's 680km of rural roads, were surveyed by 17



Photo: K.Payne, RCC

local volunteers and then assessed by the RCC to determine the conservation status of the road reserves. Most of the surveys were carried out during October 2010, with some follow up surveys in May 2011. The enthusiastic effort of the local roadside surveyors, and the support provided by Denmark Shire Council and in particular by the local coordinator and NRM Officer, Yvette Caruso, ensured that this project was successfully completed. The roadside surveyors were:

- **Judy Barfett**
- Jess Beckerling
- Carl & Emma Dusenberg
- Lee Ewing
- Kelli Gillies
- Barry & Sue Goldsmith
- Lucia Golebiowski
- Melissa Howe
- **Donald Hunt**

- Donna Marie
- Pauline McHenry
- Mark Parre
- Jill Rule
- Joseph van Vlijmen
- Judy Wheeler
- Caron Macneall
- Kylie Payne

1.1 **Methods**

The roadside surveys were undertaken in a vehicle, generally with two people per vehicle. The passenger recorded all the roadside survey data using the handheld devices or PDA's shown in Appendix 1. The Denmark surveys were conducted using new devices and a new survey program which was developed specifically for the roadside surveys. The new devices have inbuilt GPS and camera and collect more data, including vegetation type, tree decline, environmentally sensitive areas and additional weeds. There were some teething problems with the new system, but the Denmark volunteers have paved the way and given useful feedback for further refining the survey system.

With the new system, the data is immediately uploaded to a purpose built RCC survey website, provided there is mobile coverage. This data is then downloaded and analysed by the RCC and then the RCC works with the DEC's Geographic Information Systems (GIS) Section to generate the Roadside Conservation Value

Мар

The methods to assess and calculate the conservation value of the roadside reserves are described in Assessing Roadsides: A Guide for Rating Conservation Value (Jackson, 2002). However, this has been expanded with the new system. All volunteers participate in a 1 day presurvey volunteer training session. During this session, volunteers are given an overview of the survey process, information to assist with



Training how to use the survey devices
Photo: Y. Caruso

identifying vegetation types and weeds, step by step instructions on how to use the PDA's and survey safety information.

The process involves scoring a set of pre-selected attributes, which when combined; represent a roadside's conservation status.

The following attributes are used to produce a quantitative measure of conservation value:

- the structure of native vegetation (e.g. layers trees, shrubs, groundcovers) (Scores: 0-2)
- the extent of native vegetation (% of native vegetation cover) (Scores: 0-2)
- the approximate number of different native plant species (diversity) (Scores: 0-2)
- the degree of weed infestation (% weed cover) (Scores: 0-2)
- habitat value/value as a biological corridor
- (i) connects to other bushland areas,

provides habitat or food for reptiles birds and other animals e.g. (ii) hollow logs, (iii) tree hollows and

- (iv) flowering shrubs and
- (v) environmentally sensitive areas (yellow hockey stick markers) (Scores: 0-3)
- width of vegetated roadside (Scores: 0-1).

Each of these attributes are given a score ranging from 0 to 3 points (see above). Their combined scores provide a Roadside Conservation Value score ranging from 0 to 12. The conservation values, in the form of conservation status categories, are represented on the roadside conservation value map by the following colour codes.

Conservation Value	Conservation Status	Colour Code
9 – 12	High	Bright Green
7 – 8	Medium High	Pale Green
5 – 6	Medium Low	Orange
0 – 4	Low	Yellow

The following attributes were also noted but did not contribute to the conservation value score:

- width of road reserve
- vegetation type
- tree decline
- revegetation
- clearing
- rabbits
- presence of utilities/disturbances;
- general comments; and
- presence and percentage of 6 nominated weeds;
- presence and percentage of additional weeds

It is felt that the recording of these attributes will provide a dataset capable of being used by a broad range of shire staff plus community and land management interests.

1.2 Mapping Roadside Conservation Values

The RCC in conjunction with DEC's GIS section produce a computer-generated map (using GIS), at a scale of 1:100,000 for the Shire of Denmark. Known as the Roadside Conservation Value map (RCV map), it shows the conservation status of the roadside vegetation and the width of the road reserves within the Shire of Denmark. The data used to produce both the map and the following figures and tables are presented in Appendix 2.

Digital information of remnant vegetation and watercourses on both Crown estate and privately owned land

used in the map was obtained from the (DEC), Main Roads WA and the Department of Agriculture and Food WA.

1.3 Roadside Conservation Value Categories

<u>High conservation value roadsides</u> are those with a score between 9 and 12, and generally display the following characteristics:

- intact natural structure consisting of a number of layers, i.e. ground, shrub, tree layers;
- extent of native vegetation greater than 70%, i.e. little or no disturbance;
- high diversity of native flora, i.e. greater than 20 different species;
- few weeds, i.e. less than 30% of the total plants; and
- high value as a biological corridor, i.e. may connect uncleared areas, contain flowering shrubs, tree hollows and/or hollow logs for habitat and environmentally sensitive areas.



along Mt Lindsay Rd (above) and Tindale Rd (below) which contain relatively intact, undisturbed and diverse remnant vegetation. Photos: K. Payne, RCC.



<u>Medium-high conservation value roadsides</u> are those with a score between 7 and 8, and generally have the following characteristics:

- generally intact natural structure, with one layer disturbed or absent:
- extent of native vegetation between 30 and 70%;
- medium to high diversity of native flora, i.e. between 6 and 19 species;
- few to half weeds, i.e. between 30 and 70% of the total plants;
 and
- medium to high value as a biological corridor and with some habitat features.



Medium-high conservation value roadsides contain a moderate number of native species, some disturbance and weed invasion, but have relatively intact natural structure.

Photo: K. Payne, RCC.

<u>Medium-low conservation value roadsides</u> are those with a score between 5 and 6, and generally have the following characteristics:

- natural structure disturbed, i.e. one or more vegetation layers absent;
- extent of native vegetation between 30 and 70%;
- medium to low diversity of native flora, i.e. between 0 and 5 species;
- half to mostly weeds, i.e. between 30-70% of total plants; and
- medium to low value as a biological corridor and with few habitat features. May still contain ESA's with yellow hockey stick markers.

<u>Low conservation value roadsides</u> are those with a score between 0 and 4, and generally have the following characteristics:

- narrow roadsides with no natural structure i.e. two or more vegetation layers absent;
- low extent of native vegetation, i.e. less than 30%;
- low diversity of native flora, i.e. between 0 and 5 different species;
- mostly weeds, i.e. more than 70% of total plants, or ground layer totally weeds; and
- low value as a biological corridor and minimal habitat value.



Low conservation value roadsides are typically dominated by weeds and have little or no native vegetation.

s: K. Payne, RCC





2.0 USING THE ROADSIDE CONSERVATION VALUE (RCV) MAP

The Roadside Conservation Value (RCV) map initially provides an inventory of the condition of the roadside vegetation. This is important as the quality of roadside vegetation has far reaching implications for sustaining biodiversity, tourism and landcare values.

Moreover, the data and map can be incorporated as a management and planning tool for managing the roadsides, as it enables the condition of roadside vegetation to be easily assessed. This information can then be used to identify environmentally sensitive areas, high conservation roadsides or strategically important areas, and thus ensure their conservation. Conversely, it enables degraded areas to be identified as areas important for strategic rehabilitation or in need of specific management techniques or weed control programs.

The map can also be used as a reference to overlay transparencies of other information relevant to roadside conservation. This enables the roadside vegetation to be assessed in the context of its importance to the Shire's overall conservation network. Other overlays, such as the degree of weed infestation, or the location of environmentally sensitive areas or future planned developments, could also be produced as an aid to roadside management.

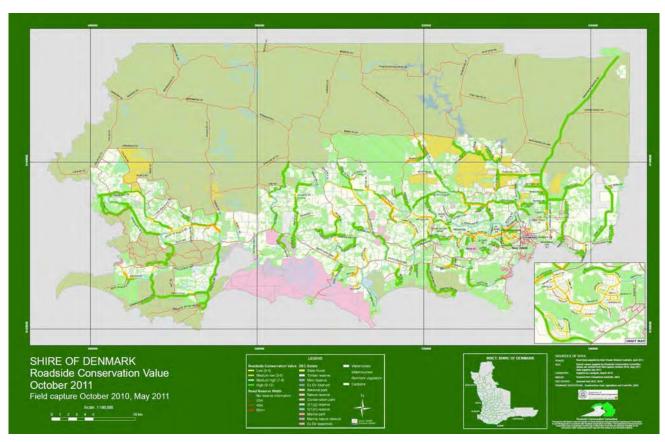


Figure 1. The RCV map depicts roadside conservation values in the Shire of Denmark.

As well as providing a road reserve planning and management tool, the RCV map can also be used for developing:

- roadside vegetation management plans;
- Regional or District fire management plans;
- Landcare and/or Bushcare projects that would be able to incorporate the information from this survey into 'whole of' landscape projects; and
- tourist routes, i.e. roads depicted as high conservation value would provide visitors to the district with an
 insight to the flora of the district.



Catchment recovery projects, such as revegetation programs can utilise the information conveyed on roadside conservation value maps.

Photo: RCC



Weed control along a roadside. Photo: Main Roads WA



The survey data and map can be used in developing regional or district fire management plans.

Photo: DEC



The road manager can declare high conservation value roads as Flora Roads.

Photo: K. Gillies – Tindale Rd, Kentdale

3.0 RESULTS

Data collected during the Shire of Denmark roadside survey has been compiled and a summary is presented (Table 2). Total kilometres and percentages of roadside occupied by each of the conservation status categories and the attributes used to calculate the conservation values is provided. As roadsides occur on both sides of the road, roadside distances (km) are equal to *twice* the actual distance of road travelled.

- Canimar,	y iiii Oriiiati	om om	e of Denmark		
Length of roadsides surveyed: 877.42km (438.7km of road)					
Roadside Conservation Status			Roadside Conservation Values		
	Total (km)	(%)	Score	Total (km)	(%
Low (0-4)	100.4	11.4	0	21.4	2.
Medium-low (5-6)	73.0	8.3	1	27.15	3.
Medium-high (7-8)	166.2	18.9	2	16	1.
High (9-12)	537.92	61.3	3	7.7	0.
			4	28.1	3.
Total	877.42	100%	5	33.75	3.
			6	39.2	4.
Structure of Native Vegetation	on in Roadsi	des_	7	74	8.
	Total (km)	(%)	8	92.2	10.
0 vegetation layers	42.05	4.79	9	63.05	7.
1 vegetation layer	32.7	3.73	10	157.6	18.
2-3 vegetation layers	802.67	91.48	11	161.4	18.
- J			12	155.87	17.
Total	877.42	100%			
	•		Total	877.42	1009
Number of Native Plan	nt Species			*****	
	Total (km)	(%)	Width of Veg	etated Road	dside
0 to 5 species	128.05	14.59		Total (km)	(%
6 to 19 species	286.55	32.66	1 to 5 m	610.20	69.
Over 20 species	462.82	52.75	5 to 20 m	267.22	30.
Over 20 species	402.02	02.70	Over 20 m	0.00	0.
Total	877.42	100%	Unknown	0.00	0.
Total	011.42	.0070	Total	877.42	1009
Predominant Adjoining	ı I and Use		Total	011.42	100
ricaommant Aajomms	Total (km)	(%)	Extent of Native Vegetation		tion
Agricultural: completely cleared	172.2	19.6	<u>Extent of the</u>	Total (km)	(%
Agricultural: scattered vegetation	279.0	31.8	Less than 30%	141.9	16.1
Uncleared native vegetation	345.9	39.4	30% to 70%	212.5	24.2
Plantation	42.8	4.9	Over 70%	523.02	59.6
Drain reserve	0.9	4.9 0.1	Over 70%	J23.U2	J9.0
Urban or Industrial			Total	077 40	1009
	13.0	1.5	Total	877.42	1005
Other	23.7	2.7			
Total	077 40	100%	Uab#a	t Eastures	
Total	877.42	100/0	паріта	t Features	(0)
			0	Total (km)	(%
Mood Infortati	on		0	94.25	10.7
Weed Infestati		(0/)	1	114.55	13.0
	Total (km)	(%)	2	291.45	33.2
Heavy >70% weeds	97.3	11.09	3 or more	377.17	42.9
Medium 30-70% weeds	164.9	18.79	T	077 15	4000
Light <30% weeds	615.22	70.12	Total	877.42	1009
Total	877.42	100%			

Table 2. Summary of results from the roadside survey in the Shire of Denmark.

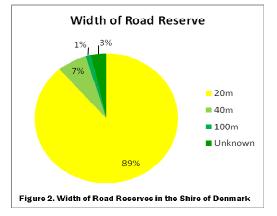
Width of Road Reserve

The width of road reserves in the Shire of Denmark was recorded in increments of 20 meters. The majority of road reserves were 20 meters in width, with 389 km (89%) of roads falling into this category. Roadsides with a 40m reserve covered 29km (7%), whilst 5km (1%) of road reserves were 100 meters in width. There were no

roads recorded with 60 or 80 meters in width. 15km (3%) of road reserves had an unknown width. (Table 3 and Figure 2).

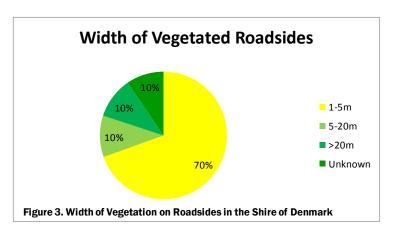
Table 3. Width of Road reserves in the Shire of Denmark

Width of Road Reserve					
Width (m)	Distance (km)	%			
20m	389.06	88.68			
40m	29.4	6.70			
100m	5	1.14			
Unknown	15.25	3.48			
Total	438.71	100.00			



Width of Vegetated Road Reserve

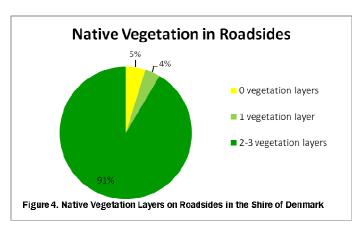
The width of vegetated roadside was recorded by selecting one of three categories, 1-5 metres, 5-20 metres or over 20 metres in width. The left and right hand sides were recorded independently, and then combined to establish the total figures. Approximately 70% (610km) of roadside vegetation was between 1 to 5 metres in width, followed by 267km (30%) of roadsides where the width of



vegetation was between 5 to 20m. There were no vegetated roadside recorded over 20m. (Table 2 and Figure 3).

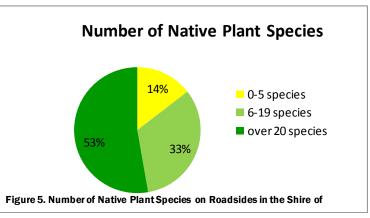
Structure of Native Vegetation on Roadsides

The number of native vegetation layers present, i.e. tree, shrub and/or ground layers, determined the 'native vegetation on roadside' value. Sections with two to three layers of native vegetation covered 91% of roadsides (803km), 4% (33km) of roadsides had only one layer and 5% (42km) had no layers of native vegetation (Table 2 and Figure 4).



Number of Native Plant Species

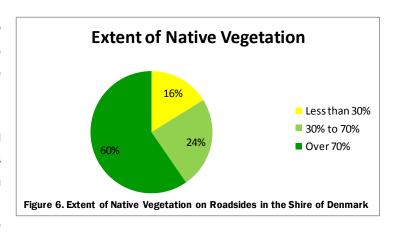
The 'number of native plant species' score provided a measure of the diversity of the roadside vegetation. Survey sections with over 20 plant species spanned 53% (463km) of the roadsides surveyed. Roadside sections with 6 to 19 plant species accounted for 33% (287km) of the roadsides while 14% (128km) of roadside contained



less than 5 plant species (Table 2 and Figure 5).

Extent of Native Vegetation

The 'extent of native vegetation' cover refers to the continuity of the roadside vegetation and takes into account the presence of disturbances such as weeds. Roadsides with extensive vegetation cover, i.e. greater than 70%, occurred along 60% (523km) of the roadsides surveyed. Survey sections with medium vegetation cover, i.e. 30% to 70%, accounted for 24% (212.5km) of the



roadsides. The remaining 16% (142km) had less than 30% native vegetation and therefore a low 'extent of native vegetation' value (Table 2 and Figure 6).

Habitat Value

This factor considered the presence of five attributes: connection of uncleared areas; presence of flowering shrubs; presence of large trees with hollows; presence of hollow logs and environmentally sensitive areas. Roadsides determined to have high number (more than 3 out of 5) of habitat features were present along 43% (377km)

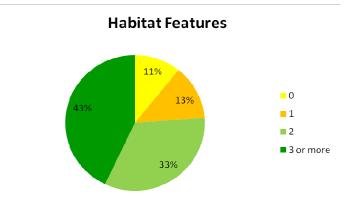
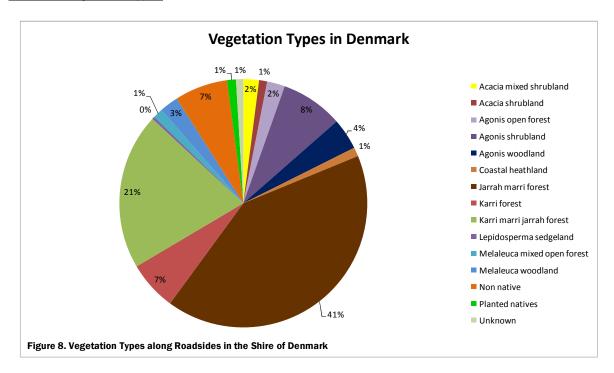


Figure 7. Number of Habitat Features on Roadsides in the Shire of Denmark

of the roadsides surveyed. Roadsides with medium high number (2 out of 5) of habitat features made up 33% (291km), and roadsides with a medium low number (1 out of 5) of habitat features occurred along 13% (115km) of the roadsides surveyed. Roadsides having no habitat features were recorded along 11% (94km) of the roadsides (Table 2 and Figure 7).

Roadside Vegetation Types

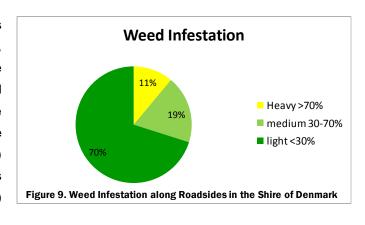


Surveyors were asked to record the main vegetation type along each section of roadside. The most dominant vegetation type was Jarrah Marri forest which was recorded along 362.2 km or 41% of roadsides in the Shire of Denmark. The next most common vegetation type was Karri Marri Jarrah forest 21% (178.72 km) followed by Agonis shrubland 8% (71.35 km). The Karri forest and Non Native vegetation types were found along 7% of roadsides (56.3 and 60.85 km respectively). Agonis woodland covered 4% of roadsides (35.7km) and Melaleuca woodland covered 3% (21.5 km). Acacia mixed shrubland and Agonis open forest vegetation types were identified along 2% of roadsides (17.9 and 20.4 km respectively). The vegetation types Acacia shrubland (9.4 km), Coastal heathland (10.3 km), Melaleuca mixed open forest (11.3 km), Planted Natives (10.1 km) and unknown vegetation type (8.4 km) all covered 1% each of roadsides. Lepidosperma sedgeland covered the least amount of roadsides with 3km. (Figure 8).

THREATS

Weed Infestation

Light levels of weed infestation (weeds comprising less than 30% of total plants), were recorded on 70% (615.22km) of the roadsides surveyed, medium level weed infestation (weeds comprising 30-70% of the total plants) occurred on 19% (164.9km) of the roadsides and 11% of roadsides (97.3km) were heavily infested with weeds (weeds comprising more than 70% of the total plants) (Table 2 and Figure 9).

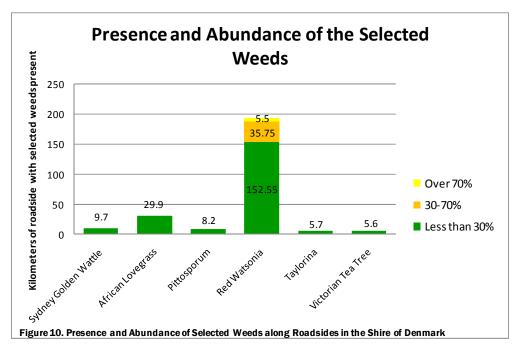


Nominated Weeds

The following weeds are depicted on clear overlays accompanying the 2011 Roadside Conservation Value map:

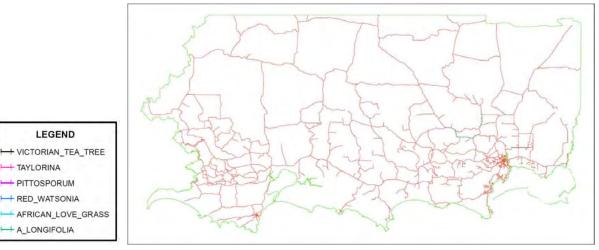
- African Lovegrass (Eragrostis curvula);
- Watsonia (Watsonia sp);
- Pittosporum (*Pittosporum undulatum*)
- Victorian Tea Tree (Leptospermum laevigatum);
- Sydney Golden Wattle (Acacia longifolia);
- Taylorina (Psoralea pinnata).

Roadside populations of nominated weeds were recorded as being present in the road reserve, and were not recorded specifically for the left and/or right hand sides. Therefore, the occurrence of each weed (in kilometres) indicates the presence of the weed within the road reserve generally, and may need to be doubled where present on both sides of the road.

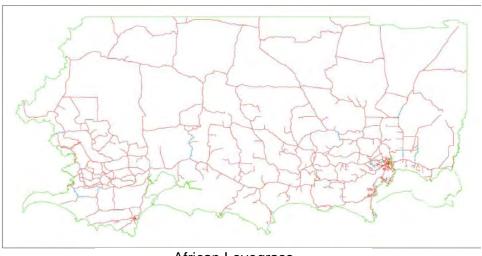


Of the nominated weeds species, Watsonia was the most prevalent and was recorded along 193.8km of the roads surveyed. The next most commonly recorded weeds were African Lovegrass (29.9km) and Sydney Golden Wattle (9.7km). Pittosporum was the next most commonly recorded weed, occurring along 8.2km of roads. Taylorina and Victorian Tea Tree were the least recorded chosen weeds and recorded along 5.7km and 5.6km of roads respectively (Figure 10). Figure 11 shows the spatial extent of these weeds on the Denmark map. These are shown in more detail on the weed overlays provided with the Roadside Conservation Value map.

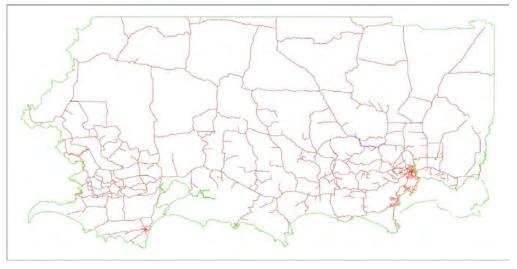
Appendix 6 provides a table and graphs of chosen and additional weeds recorded along roadsides (km) throughout October 2010 and May 2011 surveys. Appendix 2 includes a combined spreadsheet showing all weeds recorded along roadsides during the surveys.



Sydney Golden Wattle

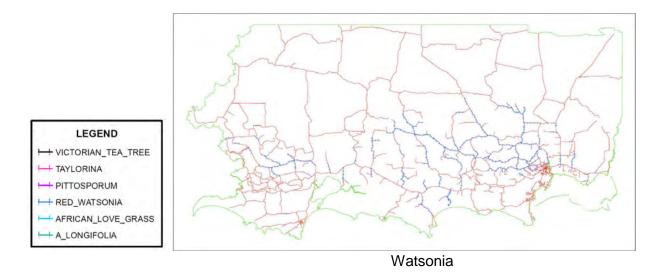


African Lovegrass

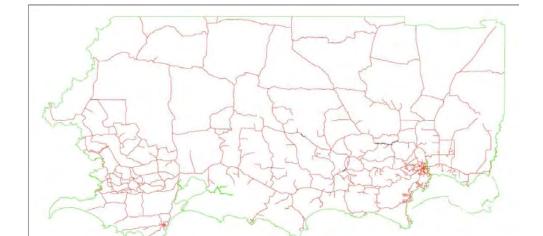


Pittosporum

Figure 11. Spatial extent of nominated weeds on roadsides in the Shire of Denmark.





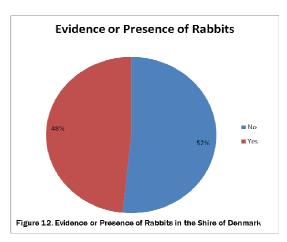


Victorian Tea Tree

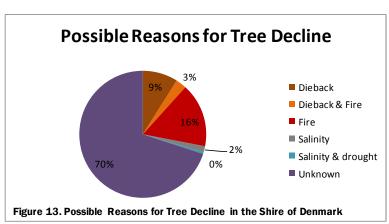
Figure 11. Spatial extent of nominated weeds on roadsides in the Shire of Denmark.

Feral Animals - Rabbits

There was no evidence or presence of rabbits on 52% (452.9km) of the roadsides surveyed. On 48% (424.52 km) of road reserves there was evidence or presence of rabbits (Figure 12).



Tree Decline

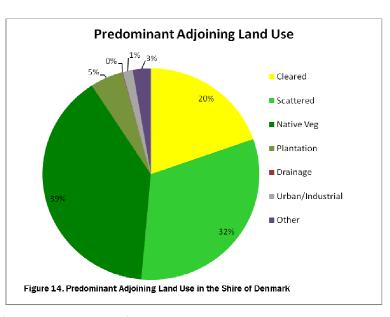


Roadside surveyors were asked to record areas of tree decline and to record a possible reason for that decline. Of the roadsides surveyed 69% (603.52 km) did not have noticeable signs of tree decline. The majority of tree decline was from an unknown cause 70% (191.75 km). The second most common possible reason for tree decline was fire 16% (44.65 km). 9% of roadsides were

possibly affected by Dieback disease (24.6 km) and 3% were possibly affected by a combination of Fire and Dieback (7.5 km). Salinity was a probable cause along 2% of roadsides (4.2 km) and a combination of salinity and drought may have affected 1.2 km of roadsides. (Figure 13).

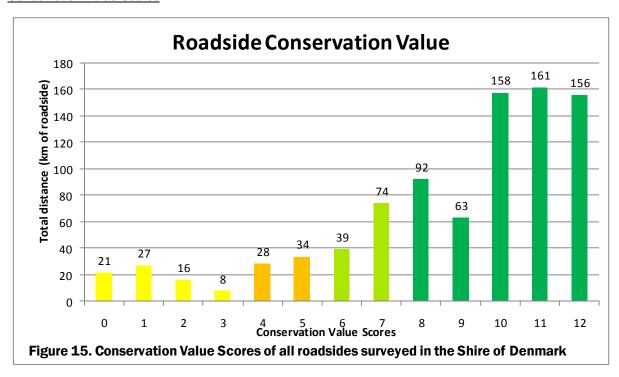
Predominant Adjoining Land Use

Uncleared native vegetation was present on 39% (346km) of the land adjoining roadsides, whilst 20% (172km) of roadsides adjoined land that had been completely cleared for agriculture. Land cleared for agriculture, containing distribution of native vegetation comprised 32% (279km) of the roadsides. Plantations of non-natives adjoined 5% (43km) of roadsides and Urban or Industrial land uses adjoined 1% (13km) of roadsides. Drainage reserves adjoined 0.1% (0.9km) roadsides and other Adjoining Land Uses



were recorded along 3% (24km) of roadsides (Table 2 and Figure 14).

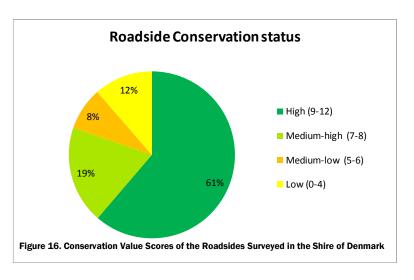
Conservation Value Scores



Conservation value scores were calculated for each section of roadside surveyed. Scores range from 0 to 12, from lowest to highest conservation value respectively (Figure 15). The most occurring roadside conservation value score was 11, with 161km of roadsides recording this score. Following this, a score of 10 was recorded along 158km of roadsides, a score of 12 covered 156km and a score of 8 was surveyed along 92km of roadsides. Roadsides with a score of 7 covered 74km, a score of 9 covered 63km, and roadsides with a score of 6 spanned 39km. Roadsides with a score of 5 spanned 34km, a score of 4 was surveyed along 28km of roadside and a score of 1 spanned 21km. Roadsides scoring 0 also covered 21km while a score of 2 spanned 16km. A score of 3 was the least recorded score which covered only 8km of roadside.

Conservation Status

The conservation status category indicates the combined conservation value of roadsides surveyed in the Shire of Denmark. Roadside sections of high conservation value covered 61% (538km) of the roadsides surveyed. Medium-high conservation value roadsides accounted for 19% of the total surveyed (166km); medium-low conservation roadside covered 8% (72km) of the total roadsides surveyed. Roadsides of low conservation value



occupied 12% (100km) of the roadsides surveyed (Table 2 and Figure 16).

Flora Roads

A Flora Road is one which has special conservation value because of the vegetation contained within the road reserve. The Roadside Conservation Committee has prepared *Guidelines for the Nomination and*

Management of Flora Roads (Appendix 8).

There are currently four Flora Roads in the Shire of Denmark. These are Tindale, Scotsdale, Ficifolia and Mt Lindsay Roads. These roads were all surveyed during the 2010 survey period and declared in May 2011. Denmark Mt Barker Road, which is managed by Main Roads, has also been nominated and recommend but is yet to be formally declared. The roadside survey and the 2011 RCV map highlighted a



Ficifolia Road, a recently declared Flora Road Photos: K. Gillies (above), K. Payne, RCC (below)

number of other roadsides that have the potential to be declared as Flora Roads. Roadsides, or large sections of roadsides, determined as having high conservation value in the Shire of Denmark include:

- Sunny Glen
- Pratt Road
- McIntosh Road
- Settlers Road
- William Bay Road
- Parker Road
- Peaceful Bay Road
- Conspicuous Beach Road
- Nunn Road
- Dingo Flats Road



If nominated, these roadsides would need to be assessed by the RCC to determine their suitability as Flora Roads as landscapes, tourism, access and other factors, not just the roadside conservation value score, are taken into account.



Tindale Road (left) and Mt Lindsay Rd (right) both recently declared Flora Roads

Photos: K. Payne, RCC



PART D

ROADSIDE MANAGEMENT RECOMMENDATIONS

1.0 Management Recommendations

The primary aim of road management is the creation and maintenance of a safe, efficient road system. However, there are often important conservation values within the road reserve and thus this section provides general management procedures and recommendations that will assist in retaining and enhancing roadside conservation values.

The Executive Officer of the Roadside Conservation Committee is also available to provide assistance on all roadside conservation matters, and can be contacted on (08) 9334 0423. The following RCC publications provide guidelines and management recommendations that will assist Local Government Authorities:

- Guidelines for Managing Special Environmental Areas in Transport Corridors
- Handbook of Environmental Practice for Road Construction and Maintenance Works
- Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines

1.1 Protect high conservation value roadsides by maintaining and enhancing the native plant communities.

This can be achieved by:

- retaining remnant vegetation;
- minimising disturbance to existing roadside vegetation;
- minimising disturbance to soil; and
- preventing or controlling the introduction of weeds.

1.2. Promote and raise awareness of the conservation value associated with roadside vegetation by:

- establishing a register of Shire roads important for conservation;
- declaring suitable roadsides as Flora Roads; and
- incorporating Flora Roads into tourist, wildflower and/or scenic drives.

1.3 Improve roadside sections of medium to low conservation value by:

- minimising disturbance caused by machinery, adjoining land practices and incidences of fire;
- carrying out a targeted weed control program;
- retaining remnant trees and shrubs;
- allowing natural regeneration;
- spreading local native seed to encourage regeneration; and
- encouraging revegetation projects by adjacent landholders.

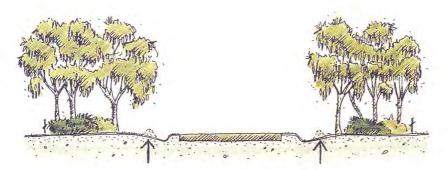


Revegetation area along Mt Lindsay Rd Photo: K. Payne, RCC.

2.0 Minimising Disturbance

Minimal disturbance can be achieved by:

- adopting a road design that occupies the minimum space;
- diverting the line of a table drain to avoid disturbing valuable flora;
- pruning branches, rather than removing the whole tree or shrub;
- not dumping spoil on areas of native flora;
- applying the Fire and Roadside Assessment before burning roadside vegetation and using methods other than fuel reduction burns to reduce fire threat. Refer to the Management Strategies recommended in 'Biodiversity Conservation and Fire in Road and Rail Reserves: Management Guidelines'.
- encouraging adjacent landholders to set back fences to allow roadside vegetation to proliferate;
- encouraging adjacent landholders to plant windbreaks or farm tree lots adjacent to roadside vegetation to create a denser windbreak or shelterbelt; and
- encouraging revegetation projects by adjacent landholders.

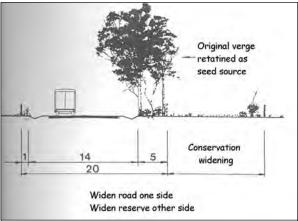


Avoid windrowing drain material into vegetation



Creative solutions: A high value Flora Road in the Shire of Plantagenet. Passing lanes were established at various locations along the road to eliminate the need for widening the whole road.

Photo: C. Macneall, RCC.



Widening a road to one side only so that a wider section of roadside vegetation is retained on the other side of the road reserve.

3.0 Planning for Roadsides

The RCC is able to provide comprehensive models of Roadside Management Plans and encourages all Shires to adopt this practice of planning for roadside conservation.

The following actions greatly enhance the likelihood of a plan which changes behaviour and results in onground actions:

- <u>Community support</u> encourage ongoing community involvement and commitment by establishing a local Roadside Advisory Committee or working group within the Shire Environmental Committee;
- <u>Contract specifications</u> maintain roadside values by developing environmental specifications for inclusion in all tender documents or work practices;
- Community education use of innovative and pertinent material can increase community understanding of roadside values; and
- <u>Training</u> promote local roadside planning initiatives and gain acceptance and understanding by involving Shire staff, contractors, utility provider staff and the community in workshops, seminars or training days. The Roadside Conservation Committee can provide this training.

Training develops recognition and understanding of roadside values and highlights best work practices. Workshops are developed to ensure that local issues and environments are dealt with and they include site visits to high conservation remnants, current projects and works. For training enquiries please contact the RCC Executive Officer on (08) 9334 0423.

4.0 Setting Objectives

The objective of all roadside management should be to:

- Protect
- native vegetation
- rare or threatened flora or fauna
- cultural and heritage values
- community assets from fire
- Maintain
- safe function of the road
- native vegetation communities
- fauna habitats and corridors
- visual amenity and landscape qualities
- water quality

- Minimise
- land degradation
- spread of weeds and vermin
- spread of soil borne pathogens
- risk and impact of fire
- disturbance during installation and maintenance of service assets
- Enhance
- indigenous vegetation communities
- fauna habitats and corridors

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Appendix

1

ROADSIDE CONSERVATION VALUE (RCV) SURVEY PROGRAM **Handheld Devices**

shire from the drop

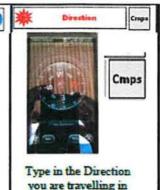












or use the compass



LEFT AND **RIGHT TAB**





the start of each

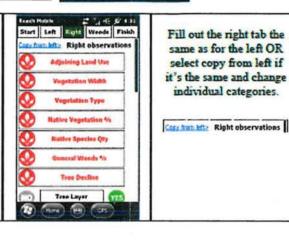
new road. Select

ok



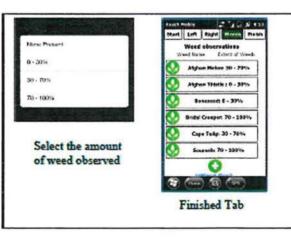


drop down menu



WEED TAB







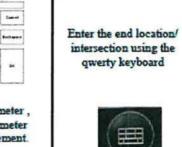




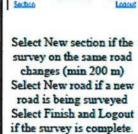






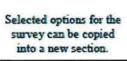


End Location/

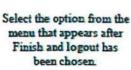




New Road









Appendix

2

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	ction		idth of getation	Ve	tent of getati on	# of N pla spe	ant	General W	eeds	Nat Vege		Hab Feat		Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Abernethy Court	3050390	1	0	0.3	0.3	E	McNabb Rd		1- 5m	1-5m	0	0	0	0	1	1	2	2	1	1	4	4		Annual grass Kikuyu	
Atkinson Rd	3050383	1	0	0.6	0.6	S	south coast hwy		1- 5m	1-5m	0	0	0	0	. 0	1	0	2	0	1	0	4	Watsonia	Kikuyu	
Bandit Rd	3050252	1	0	1.6	1.6	N	South Coast hwy		5- 20m	5-20m	1	1	1	1	1	1	2	2	1	1	7	7	Watsonia	Capeweed Annual grass	
Bandit Rd	3050252	2	1.6	2.6	1	N	South Coast hwy		5- 20m	5-20m	1	2	1	0	1	2	2	1	1	0	7	6		Capeweed Annual grass	-
Barnes Rd	3050083	1	0	1.3	1.3	SW	harewoo d Rd		1- 5m	Unknow	1	2	1	2	2	2	2	2	3	3	9	12		Annual grass Thistle Kikuyu	
Barnes Rd	3050083	2	1.3	2.6	1.3	W			1- 5m	1-5m	0	0	1	1	1	1	2	2	1	1	5	5	Watsonia	Annual grass Thistle Kikuyu	
Bames Rd (known as Suttons Rd)	3050083	1	7.04	8.44	1.4	S			1- 5m	1-5m	2	2	-	_1	2	2	2	2	3	3	10	10	Watsonia	Bridal Creeper Kikuyu	two patches of domestic ivy left hand side
Barnes Rd (known as Suttons Rd)	3050083	2	8.44	9.44	1	S		scot sdal e Rd	1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10	Watsonia	Bridal creeper	Suttons Rd is actually the southern portion of Rd #83, Barnes Rd
Barry Rd	3050135	1	.0	1.1	1.1	S	Scotsdal e Rd		1- 5m	1-5m	1	1	2	2	1	1	2	2	3	3	9	9	Watsonia	Asparagus	1.13
Bastiani Rd	3050169	1	0	0.6	0.6	NW	sth coast hwy		1- 5m	1-5m	0	0	0	0	1	0	2	1	0	1	3	2	Watsonia	Thistle Kikuyu Wild Oat Arum Lily	
Bastiani Rd	3050169	2	0.6	1.5	0.9	NW			1- 5m	1-5m	0	0	0	0	1	1	2	2	1	2	4	5	Watsonia	Thistle Kikuyu Wild Oat Arum Lily	
Bastiani Rd	3050169	3	1.5	1.8	0.3	SW			1- 5m	1-5m	0	0	0	0	1	0	0	0	0	0	1	0	Watsonia	Thistle Kikuyu Arum Lily	Rd verge veg cleared for fencing.
Board Rd	3050017	1	0	1.1	1.1	N	south coast hwy		1- 5m	1-5m	0	0	1	1	4	1	2	2	1	1	5	5	Watsonia	Arum Lily Wild Gladiolus Thistle Wild Oat	Fennel
Board Rd	3050017	2	1.1	2.9	1.8	N			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	1	8	8	Watsonia	Wild Oat	
Board Rd	3050017	3	2.9	4	1.1	N			1- 5m	1-5m	0	0	0	0	1	1	2	2	1	1	4	4	Watsonia	Wild Oat Arum Lily Wild Gladiolus	other Iridaceae
Board Rd	3050017	4	. 4	5.2	1.2	N			1- 5m	1-5m	2	0	2	0	2	0	2	2	1	0	9	2		Wild Oat Arum Lily SowThistle	Hordeum, Briza, Avena, Capeweed
Board Rd	3050017	5	5.2	6.2	1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			Hordeum, Briza

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati	pl	Native ant cies	General W	leeds		tive tation	1000	oitat tures	Valu	ervation e Score I-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	The State of the S		
Board Rd	3050017	6	6.2	7.4	1.2	N			1- 5m	1-5m	1	0	0	0	0	0	2	2	2	1	5	3	Watsonia	Annual grass Capeweed Wild Oat	Inkweed, Solanum laciniatum, Hypochaeris, Capeweed, many grasses
Boat Harbour Rd	3050015	1	0	0.8	0.8	S	main Rd (South Coast Highway)		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
Boat Harbour Rd	3050015	2	0.8	1	0.2	S			>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
Boat Harbour Rd	3050015	3	1	1.2	0.2	S			1- 5m	>20m	0	2	0	2	1	2	1	2	0	1	2	10		Capeweed	
Boat Harbour Rd	3050015	4	1.2	1.4	0.2	W			1- 5m	>20m	0	2	0	2	2	2	2	2	0	3	4	12		Capeweed Thistle	
Boat Harbour Rd	3050015	5	1.4	1.7	0.3	S			1- 5m	>20m	0	2	0	2	2	2	2	2	0	3	4	12			
Boat Harbour Rd	3050015	6	1.7	1.8	0.1	S			1- 5m	>20m	0	2	0	2	2	2	2	2	0	3	4	12			sign advising 4x4 vehicles only @ 2.0km
Boat Harbour Rd	3050015	7	1.8	2	0.2	S			1- 5m	>20m	0	2	0	2	2	2	2	2	1	3	5	12			sign advising 4x4 vehicles only @ 2.0km
Bowman Close	3050389	1	0	0.2	0.2	NW	Abenethy Close		1- 5m	1-5m	0	0	0	0	1	1	2	2	1	1	4	4		Annual grass Kikuyu Tagasaste	Finishes at cul-de-sac (Rd in town site)
Brenton Rd	3050413	1	0	0.2	0.2	S	South Coast Hwy		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	1	11	9			
Brenton Rd	3050413	2	0.2	0.6	0.4	S			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			
Brenton Rd	3050413	3	0.6	0.7	0.1	S			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			20
Brenton Rd	3050413	4	0.7	0.9	0.2	S			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10		Arum Lily Annual grass	changes to track pennyroyal
Chauncey Place	3050509	1	0	0.1	0.1	W	Peace Street		1- 5m	1-5m	0	. 0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at cul-de-sac
Church Rd	3050073	1	0	0.1	0.1	SW	Mt Barker Rd		5- 20m	5-20m	2	2	2	2	2	2	2	2	2	2	11	11			
Church Rd	3050073	2	0.1	0.3	0.2	SW	Mt Barker Rd		5- 20m	5-20m	2	2	2	2	2	2	2	2	2	2	11	11			
Church Rd	3050073	3	0.3	0.8	0.5	W	Mt Barker Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Church Rd	3050073	4	0.8	1.1	0.3	W	Mt Barker Rd		1- 5m	5-20m	2	2	2	2	2	2	2	2	2	2	10	11			
Churchhill Rd	3050037	1	0	0.6	0.6	W			1- 5m	>20m	2	2	2	2	2	2	2	2	2	3	10	12		Kikuyu	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation	Ve	tent of getati	pla	lative ant cies	General W	eeds		tive tation		oitat tures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Churchhill Rd	3050037	2	0.6	1.4	8.0	W			>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
Churchhill Rd	3050037	3	1.4	1.7	0.3	W			1- 5m	1-5m	0	0	0	0	0	0	2	2	1	1	3	3	Watsonia	Wild Gladiolus Kikuyu Annual Veldt Grass	
Churchhill Rd	3050037	4	1.7	1.9	0.2	W			>20 m	1-5m	2	1	2	1	2	1	2	2	3	1	12	6		Wild Gladiolus Kikuyu	
Churchhill Rd	3050037	. 5	1.9	2.6	0.7	W			5- 20m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		8.59	
Churchhill Rd	3050037	6	2.6	5.2	2.6	W		Mou nt Lind say Rd	>20 m	1-5m	2	1	2	1	2	1	2	2	3	1	12	6	Watsonia	Wild Oat Annual grass Wild Gladiolus Kikuyu	
Collins Place	3050451	1	0	0.5	0.5	SW	Peace Street		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1.		Annual grass Kikuyu	Finishes at private property
Conspicuou s Beach Rd	3050291	1	0	0.8	0.8	S	South Coast Hwy		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1	African Love Grass	Capeweed SowThistle Annual grass	
Conspicuou s Beach Rd	3050291	2	0.8	1	0.2	S			1- 5m	1-5m	1	1	1	1	2	. 2	2	2	2	2	8	8			
Conspicuou s Beach Rd	3050291	3	1	1.7	0.7	S			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Conspicuou s Beach Rd	3050291	4	1.7	2.1	0.4	S			Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Conspicuou s Beach Rd	3050291	5	2.1	2.3	0.2	S	12		Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Conspicuou s Beach Rd	3050291	6	2.3	4	1.7	S			Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Conspicuou s Beach Rd	3050291	7	4	6	2	S			Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Creek Rd (Shire of Manjimup)		1	0	4	4	Е	Hilltop Rd		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	Sections 1,2,3,4 inc Gully, Hilltop & Pool Rd. Shire of Manjimup, will not be plotted on map
Crusoe Beach Rd	3050069	1	0	0.3	0.3	S	South Coast Hwy		1- 5m	1-5m	0	2	0	0	0	0	0	0	0	0	0	2		Annual grass Dock Kikuyu Thistle	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersect	tion		idth of jetation	Ve	ent of getati	pla	Native ant cies	Ge	neral W	eeds		tive tation		oitat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R		L	R	L	R	L	R	L	R			
Crusoe Beach Rd	3050069	2	0.3	1.1	0.8	S	South Coast Hwy		1- 5m	1-5m	0	0	0	0	#	- 0	0	0	2	0	2	0	4		Annual grass Dock Kikuyu Thistle	
Crusoe Beach Rd	3050069	3	1.1	2	0.9	S	South Coast Hwy		>20 m	>20m	2	2	2	2		2	2	2	2	3	3	12	12		Annual grass Dock Kikuyu Thistle	
Cussons Rd	3050019	1	0	0.6	0.6	N	Starts at South Coast Hwy		1- 5m	>20m	2	2	2	2		2	2	2	2	2	2	10	11	58	Annual grass	
Cussons Rd	3050019	2	0.6	1.1	0.5	N			1- 5m	1-5m	2	0	2	1		2	0	2	2	2	2	10	5		Annual grass	
Cussons Rd	3050019	3	1.1	1.8	0.7	N			1- 5m	1-5m	2	2	2	2	13.5	2	2	2	2	2	2	10	10		Annual grass	
Cussons Rd	3050019	4	1.8	2.3	0.5	N		Mou nt Sha dfort h Rd	1- 5m	1-5m	1	1	1	1		1	1	2	2	2	2	7	7	Watsonia	Annual grass Kikuyu	
Denmark Mt Barker Rd	M014	1	0	0.5	0.5	N	South Coast Hwy		1- 5m	1-5m	1	1	0	2		2	2	2	2	2	3	7	10	Watsonia		Oxalis, plantation left 0.4-0.5
Denmark Mt Barker Rd	M014	2	0.5	0.9	0.4	N	South Coast Hwy		1- 5m	1-5m	0	1	0	1		1	1	2	1	2	2	5	6	African Love Grass Watsonia	Annual grass Wild Oat	
Denmark Mt Barker Rd	M014	3	0.9	1.9	1	N	South Coast Hwy		1- 5m	1-5m	1	1	0	0		2	2	2	2	2	2	7	7	African Love Grass Watsonia	Annual grass Wild Oat	Brome Flatweed
Denmark Mt Barker Rd	M014	4	1.9	2.4	0.5	N	South Coast Hwy		1- 5m	1-5m	1	1	0	0		2	2	2	2	1	1	6	6		Annual grass Wild Oat Fumitory	plantation first few 100m after Rd on left
Denmark Mt Barker Rd	M014	5	2.4	2.7	0.3	N	South Coast Hwy		1- 5m	1-5m	2	2	2	2		2	2	2	2	2	3	10	11			lok
Denmark Mt Barker Rd	M014	6	2.7	3.3	0.6	N	South Coast Hwy		1- 5m	1-5m	2	2	2	2		2	2	2	2	2	3	10	11			
Denmark Mt Barker Rd	M014	7	3.3	4.3	1	N	Church		1- 5m	1-5m	2	2	2	2		2	2	2	2	1	3	9	11			
Denmark Mt Barker Rd	M014	8	4.3	5.4	1.1	N			1- 5m	1-5m	2	2	2	2		2	2	2	2	2	3	10	11			Agonis understorey, plantation on right last5.1- 5.3
Denmark Mt Barker Rd	M014	9	5.4	5.9	0.5	N			1- 5m	1-5m	2	2	2	2		2	2	2	2	3	3	11	11.			
Denmark Mt Barker Rd	M014	10	5.9	6.4	0.5	N			1- 5m	1-5m	2	2	2	2		2	2	2	2	3	3	11	11		Wild Pines	Banksia grandis

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	ction		lidth of getation	Ve	tent of getati	pla	Native ant cies	General W	eeds		tive tation	Hat Feat		Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	- Service Control of the Control of		
Denmark Mt Barker Rd	M014	11	6.4	6.8	0.4	N			1- 5m	1-5m	1	2	1	2	2	2	2	2	3	3	9	11	Watsonia	Wild Pines	Banksia grandis Churchill Rd end
Denmark Mt Barker Rd	M014	12	6.8	8.4	1.6	N	Churchill Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	African Love Grass	Wild Pines	
Denmark Mt Barker Rd	M014	13	8.4	8.7	0.3	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Denmark Mt Barker Rd	M014	14	8.7	10.7	2	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			Agonis understorey
Denmark Mt Barker Rd	M014	15	10.7	11	0.3	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Denmark Mt Barker Rd	M014	16	11	15.6	4.6	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			Mela yellow & Agonis understorey
Denmark Mt Barker Rd	M014	17	15.6	16	0.4	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Mela yellow & Agonis understorey
Denmark Mt Barker Rd	M014	18	16	16.6	0.6	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Mela yellow & Agonis understorey
Denmark Mt Barker Rd	M014	19	16.6	16.7	0.1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	71	10			Mela yellow & Agonis understorey
Denmark Mt Barker Rd	M014	20	16.7	17.1	0.4	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			Agonis understorey
Denmark Mt Barker Rd	M014	21	17.1	17.2	0.1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Agonis understorey
Denmark Mt Barker Rd	M014	22	17.2	20.8	3.6	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			Agonis understorey
Denmark Mt Barker Rd	M014	23	20.8	21.1	0.3	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Agonis understorey
Denmark Mt Barker Rd	M014	24	21.1	24.3	3.2	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10		197	Agonis understorey
Denmark Mt Barker Rd	M014	25	24.3	24.5	0.2	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Agonis understorey
Denmark Mt Barker Rd	M014	26	24.5	25.5	1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			Agonis understorey
Denmark Mt Barker Rd	M014	27	25.5	26	0.5	N	e		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10,	Watsonia		changed into Plantagenet shire Fog grass Annual weeds on right Melaleucas on left
Denmark Mt Barker Rd	M014	28	26	26.8	0.8	N	14		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	Watsonia		changed into Plantagenet shire euc rudis in creekline

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersect	ion		idth of getation	11490000	tent of getati	pla	Native ant cies	General W	leeds		tive tation	XIVAGE	bitat tures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Gombined		
Denmark Mt Barker Rd	M014	29	26.8	27.8	1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10			
Denmark Mt Barker Rd	M014	30	27.8	28.3	0.5	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass		Euc rudis
Denmark Mt Barker Rd	M014	31	28.3	29.2	0.9	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass		Euc rudis
Denmark Mt Barker Rd	M014	32	29.2	29.7	0.5	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass	Wild Pines	Euc rudis
Denmark Mt Barker Rd	M014	33	29.7	30.8	1.1	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass	Wild Oat	Fog grass
Denmark Mt Barker Rd	M014	34	30.8	33.3	2.5	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass	Wild Oat Wild Radish	33.9 plantation on left
Denmark Mt Barker Rd	M014	35	33.3	34.5	1.2	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	African Love Grass	Wild Oat Wild Radish	33.9 plantation on left
Denmark Mt Barker Rd	M014	36	34.5	35.4	0.9	N			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	African Love Grass	Wild Oat Wild Radish	
Denmark Mt Barker Rd	M014	37	35.4	35.7	0.3	N			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	African Love Grass	Wild Oat	
Denmark Mt Barker Rd	M014	38	35.7	36	0.3	N			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	African Love Grass		
Denmark Mt Barker Rd	M014	39	36	36.9	0.9	N			1- 5m	1-5m	2	2	1	2	2	2	2	2	3	2	10	10	African Love Grass		
Denmark Mt Barker Rd	M014	40	36.9	37.5	0.6	N			1- 5m	1-5m	0	1	0	0	0	2	0	1	0	0	0	4	African Love Grass	Wild Oat	Fog grass
Denmark Mt Barker Rd	M014	41	37.5	38	0.5	N			1- 5m	1-5m	0	1	0	0	1	2	2	2	1	0	4	5	African Love Grass	Wild Oat	Fog grass
Denmark Mt Barker Rd	M014	42	38	39.2	1.2	N			1- 5m	1-5m	0	0	0	0	1	1	0	1	0	0	1	2	African Love Grass	Wild Oat Wild Radish	Fog grass, Brome
Denmark Mt Barker Rd	M014	43	39.2	39.9	0.7	N			1- 5m	1-5m	2	2	1	2	2	2	2	2	3	3	10	11.			
Dingo Flat Rd	3050032	1	0	0.4	0.4	NE? W			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	3	12	11	Watsonia	Annual grass Kikuyu SowThistle	
Dingo Flat Rd	3050032	2	0.4	2	1.6	NE? W		Brui n Rd	5- 20m	1-5m	2	2	2	2	2	2	2	2	3	3	12	11	Watsonia	Annual grass Kikuyu	in last section change adjoining land use to scatter veg.
Dingo Flat Rd	3050032	3	2	4.4	2.4	NE? W			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	3	12	11		Annual grass Wild Pines	picked up Dingo Flat Ro again after completing Nunn Rd.
Dingo Flat Rd	3050032	4	4.4	5.8	1.4	NE? W		Nun n Rd	5- 20m	1-5m	2	2	2	2	2	2	2	2	3	3	12	11	Watsonia	Annual grass	picked up Dingo Flat Rd again after completing Nunn Rd.

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati on	# of N pla spe	int	General W	eeds	Nat Veget	tive tation	100000000000000000000000000000000000000	oitat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Dingo Flat Rd	3050032	5	5.8	6.3	0.5	NW			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		Annual grass	
Dingo Flat Rd	3050032	6	6.3	7.5	1.2	NW			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		Annual grass	
Dingo Flat Rd	3050032	7	7.5	7.9	0.4	NW			1- 5m	1-5m	2	1	2	1	2	1	2	2	3	2	11	7		Annual grass Thistle Kikuyu Veldt Grass	
Dingo Flat Rd	3050032	8	7.9	8.9	1	W			1- 5m	1-5m	1	2	2	1	2	2	2	2	3	1	10	8	Watsonia	Annual grass Thistle	
Dingo Flat Rd	3050032	9	8.9	9.6	0.7	NW			1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8		Annual grass Thistle	
Dingo Flat Rd	3050032	10	9.6	10.1	0.5	N		Hazl eval e Rd	5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	
East River Rd	3050035	1	2.49	2.59	0.1	W	Mt Barker Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	1	1	9	9	Watsonia	Cape Tulip DoubleG	
East River Rd	3050035	2	2.59	2.89	0.3	W			1- 5m	1-5m	0	2	0	2	0	2	2	2	1	1	3	9		Cape Tulip DoubleG Asparagus Kikuyu Wild Gladiolus	
East River Rd	3050035	3	2.89	3.19	0.3	W			1- 5m	1-5m	0	1	0	1	0	2	1	2	1	1	2	7		Cape Tulip DoubleG Asparagus Kikuyu Wild Gladiolus	
East River Rd	3050035	4	3.19	3.29	0.1	W			1- 5m	1-5m	1	2	2	2	2	2	2	2	1	1	8	9			
East River Rd	3050035	5	3.29	3.59	0.3	W			1- 5m	1-5m	1	2	1	2	0	2	2	2	1	1	5	9		Eastern States Wattles Wild Gladiolus Kikuyu	
Edwards Street	3050511	1	0	0.2	0.2	W	Peace Street		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at cul-de-sac Townsite Rd
Femley Rd	3050046	1	0	1.3	1.3	N .	Scotsdal e Rd		1- 5m	1-5m	2	0	2	0	2	0	2	0	3	0	11	0	Watsonia	Capeweed Thistle Annual grass Eastern States Eucalyptus Species	Main Rds data known as Feanlea Rd
Femley Rd	3050046	2	1.3	2.5	1.2	N	Scotsdal e Rd		1- 5m	1-5m	2	1	2	1	2	2	2	2	3	2	11	-8	Watsonia	Capeweed Thistle Annual grass Eastern States Eucalyptus Species	
Femley Rd	3050046	3	2.5	3.4	0.9	N	Scotsdal e Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10	Watsonia	Annual grass	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion	2.7.6	idth of getation	Ve	tent of getati	pl	Native ant ecies	General W	eeds		tive tation		oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	ALC: CO	L	R	L	R	L	R	L	R	L	R			
Femley Rd	3050046	4	3.4	3.7	0.3	NW	Scotsdal e Rd		1- 5m	Unknow n	0	1	0	1	1	2	2	2	1	2	4	9	Watsonia	Annual grass Wild Pines	
Femley Rd	3050046	5	3.7	4.1	0.4	N	Scotsdal e Rd		1- 5m	Unknow n	1	2	2	2	1	2	2	2	2	2	8	11	Watsonia	Thistle Nightshade	Blackberry prevalent this section.
Femley Rd	3050046	6	4.1	4.6	0.5	NE	Scotsdal e Rd		1- 5m	1-5m	1	1	1	1	1	2	2	2	2	2	7	8	Watsonia	Thistle Nightshade Annual grass	
Ficifolia Rd	3050168	1	0	1.2	1.2	Е			Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed	
Ficifolia Rd	3050168	2	1.2	1.7	0.5	E			Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass	
Ficifolia Rd	3050168	3	1.7	2.3	0.6	E			Unk now n	Unknow n	2	0	2	0	2	0	2	2	2	2	11	5		Annual grass SowThistle Dock Thistle	
Ficifolia Rd	3050168	4	2.3	2.8	0.5	Е			Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2		0 11		Annual grass Capeweed SowThistle	
Ficifolia Rd	3050168	5	2.8	3.3	0.5	E			Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed SowThistle Thistle	
Ficifolia Rd	3050168	6	3.3	3.8	0.5	E			Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11			
Ficifolia Rd	3050168	7	3.8	4.4	0.6	Е			Unk now	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11			
Ficifolia Rd	3050168	8	4.4	5.5	1.1	Е			Unk now n	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			Ficifolia, Sheoak woodland
Ficifolia Rd	3050168	9	5.5	6.4	0.9	E		Con spic uou s Rd	Unk now n	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Flower Way	3050512	1	0	0.3	0.3	E	Peace Street		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1	5	Annual grass Kikuyu	Finishes at cul-de-sac Townsite Rd
Fs Rd	3050087	1	0	1.7	1.7	S	Scotsdal e Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		Annual grass Kikuyu Thistle Wild Oat	
Fs Rd	3050087	2	1.7	1.9	0.2	SE	Scotsdal e Rd		1- 5m	Unknow n	1	2	1	2	2	2	2	2	1	3	7	12		Annual grass Kikuyu Thistle Wild Oat	
Fs Rd	3050087	3	1.9	3.1	1.2	S	Scotsdal e Rd		1- 5m	1-5m	1	2	1	2	2	2	2	2	1	3	7	11	Watsonia Pittosporum	Kikuyu Thistle Annual grass	
Fs Rd	3050087	4	3.1	3.7	0.6	SW	Scotsdal e Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	3	8	9	Watsonia	Kikuyu Thistle Annual grass	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	ent of getati	40.000000	lative ant cies	General W	eeds	Nat Vege	ive tation	Hab Feat		Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Secretary Company		
George Ebbett Rd	3050170	1	Ô	1.8	1.8	S	South Coast Hwy		5- 20m	5-20m	1	1	1	1	1	1	2	2	1	1	7	7	Watsonia	SowThistle Annual grass Capeweed Kikuyu Wild Oat	Solanum laciniatum along west Rd verge lotus
George Ebbett Rd	3050170	2	1.8	2.5	0.7	E	South Coast Hwy		5- 20m	5-20m	1	0	1	0	1	0	2	2	1:	1	7	4	Watsonia	SowThistle Annual grass Capeweed Wild Oat	Lotus
Glenrowan Rd	3050013	1	0	1	1	NW		robe rts	1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Glenrowan Rd	3050013	2	1	1.8	0.8	W			1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Glenrowan Rd	3050013	3	1.8	2.95	1.15	W			1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Glenrowan Rd	3050013	4	2.95	4.1	1.15	W	1		1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Glenrowan Rd	3050013	5	4.1	5.6	1.5	W			1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Greatorex Rd	3050093	1	0	0.5	0.5	N	Parker Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8		Kikuyu Thistle Annual grass	
Gully Rd		1	0	0.6	0.6	N	South Coast Hwy		>20 m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12			Shire of Manjimup Rd
Gully Rd		2	0.6	7.3	6.7	NE	South Coast Hwy		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	Shire of Manjimup Rd
Gully Rd		3	7.3	8.1	0.8	NE	South Coast Hwy		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	Shire of Manjimup Rd
Gully Rd		4	8.1	11.2	3.1	NE	South Coast Hwy		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	sections 1,2,3,4 include Gully Rd. Hilltop Rd. and Pool Rd.
Hamilton Rd	3050030	1	0	0.5	0.5	S	Churchhil I Rd		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
Hamilton Rd	3050030	2	0.5	1.3	0.8	S	Churchhil I Rd		1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8		Wild Gladiolus Kikuyu	Polygala and Vetch presen at 1.1 kilometres
Hamilton Rd	3050030	3	1.3	1.8	0.5	S	Churchhil I Rd		1- 5m	>20m	1	2	1	2	1	2	2	2	3	3	8	12		Wild Gladiolus Kikuyu Annual grass	
Hamilton Rd	3050030	4	1.8	2.3	0.5	S	Churchhil I Rd		1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8		Wild Gladiolus Kikuyu Annual grass	
Hamilton Rd	3050030	5	2.3	3.3	1	S	Churchhil I Rd		>20 m	1-5m	2	1	2	1	2	1	2	2	3	3	12	8	Watsonia	Kikuyu Annual grass	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati on	pl	Native ant cies	General W	leeds		tive tation	Hab Feat	oitat	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
522		560	(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	GOIIIDIIICU		
Hamilton Rd	3050030	6	3.3	3.7	0.4	S	Churchhil I Rd		1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8	Watsonia	Kikuyu Annual grass	
Hamilton Rd	3050030	7	3.7	4	0.3	S	Churchhil I Rd		1- 5m	1-5m	0	0	0	0	0	0	2	1	0	0	2	1	Watsonia	Kikuyu Annual grass	
Happy Valley Rd	3050011	1	0	0.8	0.8	S	Scotsdal e Rd		1- 5m	1-5m	0	2	1	1	1	2	2	2	2	2	6	9	Watsonia	Annual grass	
Happy Valley Rd	3050011	2	0.8	2.3	1.5	S			1- 5m	1-5m	0	2	1	2	1	1	2	2	2	2	6	9	Watsonia	Annual grass Wild Oat	
Happy Valley Rd	3050011	3	2.3	3	0.7	E			1- 5m	1-5m	0	1	0	1	1	2	0	2	0	2	1	8	Watsonia	Annual grass Wild Oat Thistle Kikuyu Eastern States Eucalyptus Species	
Happy Valley Rd	3050011	4	3	3.3	0.3	E			1- 5m	1-5m	0	0	0	1	1	1	0	2	0	2	1	6	Watsonia	Annual grass Wild Oat Thistle Kikuyu Eastern States Eucalyptus Species	
Happy Valley Rd	3050011	5	3.3	5.1	1.8	E			1- 5m	1-5m	0	0	0	0	0	1	0	0	0	0	0	1	Watsonia	Annual grass Wild Oat Thistle Kikuyu Eastern States Eucalyptus Species	
Happy Valley Rd	3050011	6	5.1	5.7	0.6	E			1- 5m	1-5m	0	0	0	1	0	1	0	2	0	1	0	5	Watsonia	Annual grass Wild Oat Thistle Kikuyu	
Happy Valley Rd	3050011	7	5.7	6.8	1.1	SW			5- 20m	5-20m	1	1	1	1	2	2	2	2	1	1	8	8		Annual grass Wild Oat Thistle Kikuyu	
Happy Valley Rd	3050011	8	6.8	7.8	1	SE			1- 5m	1-5m	1	1	1	2	1	2	2	2	3	3	8	10	Watsonia	Eastern States Eucalyptus Species	
Happy Valley Rd	3050011	9	7.8	8.3	0.5	S			1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8		Eastern States Eucalyptus Species	
Happy Valley Rd	3050011	10	8.3	9.4	1.1	S			1- 5m	1-5m	1	0	1	1	2	2	2	2	2	2	8	7	Watsonia	Eastern States Eucalyptus Species Thistle	
Harewood Rd	3050023	1	0	0.7	0.7	NW	Scotsdal e Rd		1- 5m	1-5m	1	2	1	2	2	2	2	2	1	3	7	11	Watsonia		
Harewood Rd	3050023	2	0.7	1.7	1	NW			1- 5m	1-5m	1	1	1	1	2	2	2	2	3	2	9	8	Watsonia		
Harewood Rd	3050023	3	1.7	3.2	1.5	NW			1- 5m	1-5m	2	2		2	2	2	2	2	3	3		11	Watsonia		
Harewood Rd	3050023	4	3.2	5.3	2.1	NW			1- 5m	1-5m	1	0	1	1	1	1	2	2	2	3	7	7	Watsonia	Arum Lily Kikuyu	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	ction		idth of getation	Ve	tent of getati	# of N pla spec	int	General W	eeds		tive tation	Hat Feat	oitat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Harewood Rd	3050023	5	5.3	6.3	1	NW			Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12			
Harewood Rd	3050023	6	6.3	6.7	0.4	NW			Unk now n	1-5m	2	1	2	1	2	2	2	1	3	0	12	5	Watsonia	Capeweed Annual grass	
Harewood Rd	3050023	7	6.7	7.4	0.7	NW			1- 5m	1-5m	1	1	1	1	2	2	2	1	3	0	9	5	Watsonia	Capeweed Annual grass	
Hay River Rd	3050271	1	0	0.2	0.2	Е	Sunny Glen Rd		1- 5m	1-5m	0	0	0	0	0	0	0	0	0	0	0	0		Annual grass	
Hay River Rd	3050271	2	0.2	0.6	0.4	E			1- 5m	1-5m	1	2	0	1	1	1	2	2	2	3	6	9		Annual grass	
Hazelvale Rd	3050031	1	0	1.6	1.6	SE		Brid ge Rd	5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12	African Love Grass Watsonia	SowThistle Annual grass Veldt Grass Wild Pines Eastern States Eucalyptus Species	
Hazelvale Rd	3050031	2	1.6	3.55	1.95	SE			5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12		SowThistle Annual grass Wild Oat Veldt Grass Wild Pines	
Hazelvale Rd	3050031	3	3.55	5.3	1.75	SE		Talb ot Rd	5- 20m	5-20m	2	0	2	. 0	2	0	2	0	3	0	12	1		SowThistle Kikuyu Annual grass Wild Oat Veldt Grass Wild Pines	
Hazelvale Rd	3050031	.4	5.3	6.3	1	SE			1- 5m	5-20m	1	0	2	0	2	0	2	0	3	0	10	1	Watsonia	SowThistle Kikuyu Annual grass Wild Oat Veldt Grass Wild Pines	
Hazelvale Rd	3050031	5	6.3	8.3	2	SE		Walt er Pier ce Rd	1- 5m	5-20m	1	1	2	2	1	1	2	2	2	2	8	9		SowThistle Kikuyu Annual grass Thistle Wild Oat	
Hazelvale Rd	3050031	6	8.3	9.2	0.9	SE			1- 5m	1-5m	0	1	1	1	0	1	2	2	1	1	4	6	Watsonia	SowThistle Kikuyu Annual grass Thistle Watsonia	
Hazelvale Rd	3050031	7	9.2	10.1	0.9	S			5- 20m	1-5m	2	0	2	1	2	0	2	2	3	1	12	4	Watsonia	SowThistle Kikuyu Annual grass Thistle Watsonia	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	ent of getati	# of N pla spe	int	Ger	eral W	eeds	Nat Veget		Hab Feat		Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	1		R	L	R	L	R	L	R			
Hazelvale Rd	3050031	8	10.1	10.8	0.65	SE			5- 20m	1-5m	2	2	2	2		2	2	2	2	3	3	12	11		SowThistle Kikuyu Annual grass Wild Gladiolus	
Hazelvale Rd	3050031	9	10.7 5	11.6	0.85	S			1- 5m	5-20m	2	2	2	2		2	2	2	2	2	3	10	12	Watsonia	Colou Watsonia SowThistle Kikuyu Annual grass	
Hazelvale Rd	3050031	10	11.6	11.9	0.25	S	Vi.		1- 5m	1-5m	0	2	1	2		0	2	2	2	2	3	5		Watsonia	Annual grass Watsonia SowThistle Kikuyu Eastern States Eucalyptus Species	
Hazelvale Rd	3050031	11	11.8 5	12.3	0.4	S		Vall ey of the Gian ts Rd	1- 5m	1-5m	0	0		1		0	0	2	2	2	2	5	5	Watsonia Pittosporum	Annual grass Colou Watsonia SowThistle Wild Oat Kikuyu Watsonia	
Hicks Rd	3050055	1	0	0.5	0.5	NE	Mount Lindsay Rd		>20 m	5-20m	2	1	2	1		2	1	2	2	3	2	12	8	Watsonia	Dolichos Pea	
Hodgsons Rd	3050086	1	0	0.6	0.6	NW	Roberts Rd	- 72 - V.	1- 5m	1-5m	2	2	2	2		2	2	2	2	2	2	10	10			end at farm gate
Honey Possum Ct	3050523	1	0	0.4	0.4	NE	Cussons Rd		>20 m	>20m	0	0	0	0		0	0	1	1	0	0	2	2		Annual grass	Finishes at private property
Howe Rd	3050078	1	0	0.4	0.4	NE	Scotsdal e Rd		1- 5m	1-5m	0	0	0	0		0	0	2	2	0	0	2	2	Watsonia	Kikuyu Annual grass	Blackberry Bramble and Vinca major present at start
Howe Rd	3050078	2	0.4	1.9	1.5	NE	Scotsdal e Rd		Unk now n	Unknow n	2	2	2	2		2	2	2	2	3	3	12	12		Wild Pines	Finishes at Smith property
Illsley Drive	3050020	1	0	0.7	0.7	S	Mount Shadforth Rd		1- 5m	1-5m	2	2	2	2		2	2	2	2	3	3	11	11		Annual grass	
Illsley Drive	3050020	2	0.7	0.9	0.2	S	Mount Shadforth Rd		1- 5m	1-5m	0	2	0	2		0	2	2	1	0	0	2	7		Annual grass Kikuyu Wild Pines	Finished at Wishart Close
Jamieson Heights	3050431	1	0	0.5	0.5	W	Knowles Court		1- 5m	1-5m	0	0	0	0		0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at private property

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati on		Native ant cies	General W	eeds		tive tation		oitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
		-	(km)	(km)	(km)		Start	End	L	R	L	R	L	R		R	L	R	L	R	L	R	Combined		
Jasper Close	3050434	1	Ö	0.2	0.2	S	Peace Street		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1	=	Annual grass Kikuyu	Finishes at private property
Kent River Siding Rd	3050061	1	0	1.3	1.3	S	junction with South Coast Hwy		Unk now n	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	
Kent River Siding Rd	3050061	2	1.3	1.7	0.4	S	junction with South Coast Hwy		Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	3	11	12		Annual grass SowThistle	
Kent River Siding Rd	3050061	3	1.7	2.31	0.61	S	junction with South Coast Hwy		Unk now n	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	Rd deteriorated to rough track so ended
Kenton Drive	3050062	1	0	1.6	1.6	S	South Coast Hwy		5- 20m	5-20m	1	1	1	1	1	1	2	2	3	3	9	9	Watsonia	Capeweed Wild Oat Annual grass	
Kemutts Rd	3050039	1	0	0.2	0.2	E	Mt Barker Rd		5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10			
Kemutts Rd	3050039	2	0.2	0.7	0.5	E			5- 20m	1-5m	2	2	2	2	2	2	- 2	2	3	2	12	10			
Kemutts Rd	3050039	3	0.7	1.5	0.8	E			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10			
Kemutts Rd	3050039	4	1.5	1.6	0.1	E			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10			
Kemutts Rd	3050039	5	1.6	2	0.4	E			5- 20m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	Watsonia	Tagasaste	
Kemutts Rd	3050039	6	2		0.5	N	McIntosh Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10	Watsonia	Tagasaste	
Kemutts Rd	3050039	7	2.5	3.4	0.9	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Kemutts Rd	3050039	8	3.4	4.9	1.5	N			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10		(00)	H
Kemutts Rd	3050039	9	4.9	5.3	- 0.4	N			1- 5m	5-20m	0	2	1	2	2	2	2	2	1	2	6	- 11		Kikuyu	
Kemutts Rd	3050039	10	5.3	6.3	1	N			1- 5m	5-20m	0	2	0	2	1	2	2	2	1	2	4	- 11		Kikuyu	
Kemutts Rd	3050039	11	6.3	6.6	0.3	NE			1- 5m	5-20m	0	2	0	2	1	2	1	2	1	3	3	12		Annual grass Kikuyu	Last 2 sections different surveyors

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation	Ve	tent of egetati on	pla	lative ant cies	General W	eeds	Nat Vege	tive tation		oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Johnsmed		
Kemutts Rd	3050039	12	6.6	7.1	0.5	NE			1- 5m	>20m	0	2	0	2	0	2	0	2	0	3	0	12		Annual grass Kikuyu	Last 2 sections different surveyors
Kerr Close	3050429	1	0	0.4	0.4	NW	Peace Street		1- 5m	1-5m	0	0	0	0	1	1	1	1	0	0	2	2	Watsonia	Annual grass Kikuyu	Finishes at private property
Knowles Court	3050430	1	0	0.7	0.7	SE		Jami eso n Heig hts	1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at private property
Kordabup Rd	3050018	1	0	0.7	0.7	N	South Coast Hwy		1- 5m	1-5m	1	2	1	2	2	2	2	2	1	1	7	9	Watsonia	Kikuyu	
Kordabup Rd	3050018	2	0.7	2.1	1.4	N	South Coast Hwy		1- 5m	1-5m	1	2	1	2	2	2	2	2	1	3	7	11	Watsonia	Kikuyu Thistle Annual grass Wild Oat	
Kordabup Rd	3050018	3	2.1	2.5	0.4	N	South Coast Hwy		Unk now	1-5m	2	1	2	1	2	2	2	2	2	3	11	9			
Kordabup Rd	3050018	4	2.5	3.9	1.4	NW	South Coast Hwy		Unk now	Unknow n	2	2	2	2	2	2	2	2	3	3	12	12		34	
Kordabup Rd	3050018	5	3.9	4.6	0.7	NW	South Coast Hwy		1- 5m	Unknow n	1	2	1	2	2	2	2	2	1	3	7	12		Kikuyu	
Kordabup Rd	3050018	6	4.6	6.2	1.6	NW	South Coast Hwy		1- 5m	1-5m	0	1	1	1	1	1	2	2	1	2	5	7	Watsonia	Kikuyu Thistle Annual grass Wild Oat	
Kordabup Rd	3050018	7	6.2	7	0.8	N	South Coast Hwy		1- 5m	Unknow n	0	2	0	2	1	2	2	2	1	2	4	11	Watsonia	Kikuyu Thistle Annual grass Wild Oat	
Kordabup Rd	3050018	8	7	8.4	1.4	NW	South Coast Hwy		1- 5m	1-5m	0	1	1	1	1	2	2	2	1	2	5	8	Watsonia	Kikuyu Thistle Annual grass Wild Oat	
Kordabup Rd	3050018	9	8.4	9.4	1	NW	South Coast Hwy		1- 5m	1-5m	1	0	1	0	1	0	2	0	1	0	6	0		Kikuyu Annual grass Wild Oat	
Kordabup Rd	3050018	10	9.4	10	0.6	NW	South Coast Hwy		1- 5m	1-5m	0	0	0	0	0	2	0	0	0	0	0	2		Annual grass Wild Oat	
Kordabup Rd	3050018	11	10	10.6	0.6	NW	South Coast Hwy		1- 5m	1-5m	1	0	0	0	2	2	1	0	0	0	4	2		Annual grass Wild Oat	
Lantzke Rd	3050085	1	0	1.2	1.2	SE	man Rd		1- 5m	1-5m	1	. 1	1	1	2	2	2	2	2	3	8	9	Watsonia	Asparagus Annual grass	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersed	ction		lidth of getation	100 Y 100	tent of egetati		lative ant	General W	eeds	Nat Vege	tive tation	Hall Feat	itat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L.	R	L	R	1	R	1	R	Combined		
Lapkos Rd	3050071	1	0	1.3	1.3	N	South Coast Hwy		1- 5m	1-5m	2	1	2	1	2	2	2	2	3	3	11	9		Asparagus Annual grass Dolichos Pea	bamboo infestation at 0.5 myers Arum lily and Periwinkle at 273. man Rd
Lights Rd	3050036	1	0	0.4	0.4	SW			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	2	8	9		Kikuyu Veldt Grass Wild Gladiolus	
Lights Rd	3050036	2	0.4	0.7	0.3	S			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	2	8	9		Kikuyu	
Lights Rd	3050036	3	0.7	1	0.3	S			1- 5m	1-5m	2	2	1.	1	2	2	2	2	0	0	7	7		Kikuyu	
Lights Rd	3050036	4	1	1.2	0.2	S			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	2	8	9		Kikuyu Wild Oat	
Lights Rd	3050036	5	1.2	1.8	0.6	W			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	0	9	7	-	Kikuyu Wild Oat	
Lights Rd	3050036	6	1.8	2.1	0.3	S			1- 5m	1-5m	2	2	1	1	2	2	2	1	3	2	10	8		Out	
Lights Rd	3050036	7	2.1	2.4	0.3	S			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	2	10	9			
Lights Rd	3050036	8	2.4	2.8	0.4	S			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9			1 (2)
Lights Rd	3050036	9	2.8	3.2	0.4	NE			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9			
Lights Rd	3050036	10	3.2	3.8	0.6	NE			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9			
Lights Rd	3050036	11	3.8	4.3	0.5	NE			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9		Wild Oat	
Lights Rd	3050036	12	4.3	4.9	0.6	Е		h	1- 5m	1-5m	2	2	1	1	2	2	2	2	2	1	9	8		Kikuyu Wild Oat	
Lights Rd	3050036	13	4.9	5.3	0.4	Е			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	1	10	8		Kikuyu Wild Oat	
Lights Rd	3050036	14	5.3	5.9	0.6	Ε			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	1	10	8		Kikuyu	
Lights Rd	3050036	15	5.9	6.3	0.4	NE			1- 5m	1-5m	2	2	_1	1	2	2	2	2	1	0	8	7		Kikuyu	
Lights Rd	3050036	16	6.3	6.6	0.3	E			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	0	8	7		Kikuyu	
Lights Rd	3050036	17	6.6	6.9	0.3	NE			1- 5m	1-5m	2	2	1	1	2	2	2	2	1	1	8	8		Kikuyu Wild Oat	
Lights Rd	3050036	18	6.9	7.4	0.5	NE			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	1	10	8		Kikuyu Wild Oat V veldt Grass	
Lights Rd	3050036	19	7.4	7.8	0.4	Е	310		1- 5m	1-5m	2	2	1	1	2	2	2	2	2	1	9	8		Kikuyu Wild Oat Veldt Grass	
Lights Rd	3050036	20	7.8	8.1	0.3	E			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	1	9	8			K

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of egetati on	pl	Native ant ecies	General W	leeds	Na Vege	tive tation	/E3250100	oitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Lights Rd	3050036	21	8.1	8.5	0.4	E		Oce an Bea ch. Rd	1- 5m	1-5m	0	2	1	1	2	2	2	2	1	2	6	9		Arum Lily Annual Veldt Grass Wild Oat	
Limbourne Rd	3050033	1	4.15	5.05	0.9	NE	Happy Valley Rd		5- 20m	5-20m	2	2	2	2	2	2	2	2	2	2	11	11			left side has fire break on fence line on Rd reserve side.
Limbourne Rd	3050033	2	5.05	5.35	0.3	NE			1- 5m	5-20m	2	2	2	2	2	2	2	2	3	1	11	10			
Limbourne Rd	3050033	3	5.35	5.85	0.5	NE			1- 5m	5-20m	2	2	2	2	2	2	2	2	2	2	10	11			
Limbourne Rd	3050033	4	5.85	6.15	0.3	NE			1- 5m	5-20m	0	0	0	1	1	2	0	2	0	1	1	7	Victorian Tea Tree	Eastern States Eucalyptus Species	
Limbourne Rd	3050033	5	6.15	6.55	0.4	NE			1- 5m	5-20m	2	2	2	2	2	2	2	2	2	1	10	10	Victorian Tea Tree	Eastern States Eucalyptus Species	
Love Crescent	3050524	1	0	0.7	0.7	NW	Honey Possum Rd		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at Cussons Rd
Madfish Bay Rd	3050334	1	0	1.55	1.55	E			>20 m	>20m	2	2	1	1	2	2	2	2	2	2	10	10			Pelargonium and Senecio
Madfish Bay Rd	3050334	2	1.55	2.3	0.75	SE	William Bay Rd		>20 m	>20m	2	2	2	2	2	2	2	2	2	2	11	11			
Madfish Bay Rd	3050334	3	2.3	2.9	0.6	SW	William Bay Rd		>20 m	>20m	2	2	2	2	2	2	2	2	2	2	11	11			
McIntosh Rd	3050022	1	0	2	2	N	South Coast Hwy		1- 5m	>20m	2	2	1	2	2	2	2	2	2	3	9	12	African Love Grass Watsonia		
McIntosh Rd	3050022	2	2	2.5	0.5	N	South Coast Hwy		1- 5m	1-5m	2	2	1	2	2	2	2	2	3	3	10	11	African Love Grass Watsonia		
McIntosh Rd	3050022	3	2.5	2.7	0.2	N	South Coast Hwy		1- 5m	1-5m	0	0	0	0	2	2	2	2	3	3	7	7	African Love Grass Watsonia		
McIntosh Rd	3050022	4	2.7	4.3	1.6	N	South Coast Hwy		5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12			
McLean Rd	3050319	1	0	0.6	0.6	E	Mt Shadforth Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	0	3	6	9	Watsonia	Asparagus Annual grass	Vinca major present
McLean Rd	3050319	2	0.6	1.2	0.6	E	Mt Shadforth Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	0	3	6	9	Watsonia	Asparagus Annual grass	
McLeod Rd	3050012	1	4.87	5.47	0.6	NW			1- 5m	1-5m	0	1	0	1	0	1	0	2	0	1	0	6	Watsonia	Thistle Kikuyu	
McLeod Rd	3050012	2	5.47	6.77	1.3	W		7	1- 5m	1-5m	0	0	0	1	0	1	0	2	0	1	0	5	Watsonia	Thistle Kikuyu	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of jetation	Ve	tent of getati		Native ant cies	General W	leeds	Na Vege	tive tation		oitat tures	Valu	servation le Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
McLeod Rd	3050012	3	6.77	8.07	1.3	NW		Scot sdal e Rd	1- 5m	1-5m	0	0	0	0	1	1	2	2	1	1	4	4	Watsonia	Thistle Freesia Kikuyu	Ivy and in id weed bad at intersection
McNabb Rd	3050102	1	0	0.8	0.8	N		man Rd	1- 5m	1-5m	1	1	1	1	2	2	2	2	3	0	9	6	Watsonia	Asparagus Annual grass	
McNess Rd	3050081	1	0	0.2	0.2	N	Mount Lindsay Rd		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
McNess Rd	3050081	2	0.2	0.6	0.4	N	Mount Lindsay Rd		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12		Eastern States Wattles Annual grass	
McNess Rd	3050081	3	0.6	1.1	0.5	N	Mount Lindsay Rd		1- 5m	1-5m	1	1	0	0	1	1	2	2	2	2	6	6	Watsonia	Eastern States Wattles Annual grass Wild Gladiolus	Finishes at Bacon property
Middle Rd	3050137	1	0	0.3	0.3	N	Valley of the Giants Rd		5- 20m	5-20m	2	2	1	1	1	1	2	2	3	3	10	10		Arum Lily Dock Kikuyu Thistle	
Middle Rd	3050137	2	0.3	0.6	0.3	N	Valley of the Giants Rd		5- 20m	5-20m	2	2	1	0	1,	0	2	0	3	0	10	3		Kikuyu Thistle	
Middle Rd	3050137	3	0.6	1.6	1	N	Valley of the Giants Rd		5- 20m	5-20m	2	2	1	1	1,	1	2	2	3	3	10	10		Kikuyu Thistle Nightshade Dock	
Middleton Close	3050249	1	0	0.8	0.8	W	Mohr Drive		>20 m	1-5m	2	2	2	2	2	2	2	2	3	3	12	H			
Middleton Close	3050249	2	8.0	1.1	0.3	W	Mohr Drive		>20 m	1-5m	2	2	2	0	2	2	2	2	3	3	12	9		Annual grass	Finished at paddock
Mohr Rd	3050248	1	0	0.7	0.7	S	Mount Shadfourt h. Rd		1- 5m	>20m	2	2	1	1	2	2	2	2	1	1	8	9	Watsonia	Kikuyu	Finishes at ocean and inlet look out.
Mount Lindsay Rd	3050014	1	0	0.9	0.9	N	Scotsdal e Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia		
Mount Lindsay Rd	3050014	2	0.9	1.3	0.4	N	Scotsdal e Rd		1- 5m	1-5m	0	0	0	0	0	0	1	2	0	1	1	3	Watsonia	Nightshade Thistle Bridal Creeper	
Mount Lindsay Rd	3050014	3	1.3	2.7	1.4	N	Scotsdal e Rd		1- 5m	>20m	1	2	1	2	1	2	2	2	1	3	6	12	Watsonia Sydney Golden Wattle	Nightshade Thistle Bridal Creeper Eastern States Wattles Wild Oat Freesia	
Mount Lindsay Rd	3050014	4	2.7	2.9	0.2	N	Scotsdal e Rd		1- 5m	>20m	2	2	2	2	2	2	2	2	2	3	10	12	Watsonia Sydney Golden Wattle		

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		dth of jetation	Ve	tent of getati on	# of N pla spe		General W	leeds		tive tation	Hab Feat	oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Sond Market Name		
Mount Lindsay Rd	3050014	5	2.9	3.6	0.7	N	Scotsdal e Rd		>20 m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	Watsonia Sydney Golden Wattle		
Mount Lindsay Rd	3050014	6	3.6	4.1	0.5	N	Scotsdal e Rd		1- 5m	1-5m	2	2	1	2	2	2	2	2	2	2	9	10	Watsonia Sydney Golden Wattle	Eastern States Wattles Kikuyu	Unknown weed
Mount Lindsay Rd	3050014	7	4.1	4.3	0.2	N	Scotsdal e Rd		1- 5m	1-5m	0	0	1	0	0	0	2	2	2	2	5	4	Watsonia	Eastern States Wattles Kikuyu Annual grass	Unknown weed
Mount Lindsay Rd	3050014	8	4.3	4.7	0.4	N	Scotsdal e Rd		1- 5m	1-5m	1	2		0	1	2	2	2	2	2	7	8	Watsonia	Eastern States Wattles Kikuyu Annual grass	Unknown weed
Mount Lindsay Rd	3050014	9	4.7	6.1	1.4	N	Scotsdal e Rd		5- 20m	>20m	T 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	1	2	1	2	2	2	2	2	8	11	Watsonia	Eastern States Wattles Kikuyu Annual grass SowThistle Wild Pines Agapanthus	Vinca major present
Mount Lindsay Rd	3050014	10	6.1	7.8	1.7	N	Scotsdal e Rd		>20 m	>20m	1	2	1	2	2	2	2	2	3	3	10	12	Watsonia	Capeweed	Geranium present
Mount Lindsay Rd	3050014	11	7.8	9.4	1.6	N	Scotsdal e Rd		>20 m	1-5m	1	1	1	1	2	1	2	2	3	2	10	7	Watsonia	Kikuyu Thistle Agapanthus Eastern States Wattles SowThistle	
Mount Lindsay Rd	3050014	12	9.4	11	1.6	N	Scotsdal e Rd		>20 m	1-5m	1	2	1	1	2	2	2	2	3	3	10	10		Agapanthus Thistle	
Mount Lindsay Rd	3050014	13	11	11.4	0.4	N	Scotsdal e Rd		>20 m	1-5m	1	2	1	1	2	2	2	2	3	3	10	10		Agapanthus Thistle	Finishes at Nut cracker junction
Mt Leay Rd	3050435	1	0	0.3	0.3	N	Howe Rd		Unk now n	Unknow n	2	2	2	2	2	. 2	2	2	3	3	12	12			Finishes at Smith property
Mt Shadforth Rd	3050002	1	3.28	3.48	0.2	W	Peace Street West		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			
Mt Shadforth Rd	3050002	2	3.48	4.08	0.6	W			1- 5m	1-5m	0	0	2	2	1	1	2	2	1	1	6	6	Watsonia	Kikuyu	
Mt Shadforth Rd	3050002	3	4.08	5.28	1.2	W			1- 5m	1-5m	0	0	0	1	1	1	2	2	1	1	4	5	Watsonia	Kikuyu Annual grass Wild Oat	
Mt Shadforth Rd	3050002	4	5.28	7.28	2	w			1- 5m	1-5m	0	0	1	1	0	1	2	2	0	1	3	5	Watsonia	Kikuyu Annual grass Wild Oat	V

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion	0.000	idth of jetation	Ve	ent of getati on	# of N pla spe	ent	General W	eeds	Nat Vege	tive tation	200	oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Mt Shadforth Rd	3050002	5	7.28	8.38	1.1	W			1- 5m	1-5m	1	1	2	2	0	0	2	2	0	0	5	5	Watsonia	Kikuyu Annual grass Wild Oat Agapanthus Wild Pines SowThistle	
Mt Shadforth Rd	3050002	6	8.38	9.38	1	W			1- 5m	1-5m	2	1	2	2	2	0	2	2	0	0	8	5	Watsonia	Annual grass Kikuyu	
Mt Shadforth Rd	3050002	7	9.38	10.4	1	W			1- 5m	1-5m	1	1	2	1	1	1	2	2	3	2	9	7	Watsonia	Annual grass Kikuyu	
Mt Shadforth Rd	3050002	8	10.3 8	11.2	0.8	W			1- 5m	1-5m	0	1	2	2	1.	1	2	2	0	2	5	8	Watsonia	Annual grass Kikuyu	
Mt Shadforth Rd	3050002	9	11.1 8	13.9	2.7	W			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			finished at McLeod Rd
Myers Rd	3050167	1	0	1.4	1.4	N	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	3	3	9	9	Watsonia	Asparagus Annual grass Dolichos Pea	bamboo infestation at 0.5
Nekel Rd	3050382	1	0	0.8	0.8	NE	Osbourn e Rd		1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8	Watsonia	Kikuyu	
Nekel Rd	3050382	2	0.8	1	0.2	NE	Osbourn e Rd		1- 5m	1-5m	0	0	0	0	0	0	0	0	0	0	0	0	Watsonia	Kikuyu	end at Roberts Rd
Northumberl and Rd (Actually Tealdale Rd)	3050171 Actually 3050318	1	0	1.3	1.3	N	Scotsdal e Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia	Kikuyu Annual grass Eastern States Eucalyptus Species	Actually Tealdale Rd
Nunn Rd	3050151	1	0	0.6	0.6	N			5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12		Wild Pines	
Nunn Rd	3050151	2	0.6	2.9	2.3	N		13	5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12			
Nunn Rd	3050151	3	2.9	3.6	0.7	N			5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12			
Nunn Rd	3050151	4	3.6	5.6	2	N		Ding o Flat Rd	5- 20m	5-20m	2	2	2	2	2	2	2	2	3	3	12	12			
Nutcracker Rd	3050079	1	0	0.8	0.8	N	Mount Lindsay Rd		>20 m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	Watsonia	Wild Oat Annual grass	
Nutcracker Rd	3050079	2	0.8	1.4	0.6	N	Mount Lindsay Rd		1- 5m	1-5m	0	0	0	0	0	0	2	2	1	1	3	3	Watsonia	Wild Oat Annual grass	Finishes at Picussey property
Osbourne Rd	3050372	1	0	0.4	0.4	Е	cnr McLeod Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia		Windmill grass 0-30%

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati	# of N pla spe	ant	General W	eeds	Nat Vege	tive tation	Hal Feat		Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Osbourne Rd	3050372	2	0.4	0.7	0.3	Е	cnr McLeod Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			
Osbourne Rd	3050372	3	0.7	1.3	0.6	E	cnr McLeod Rd		1- 5m	1-5m	2	0	2	0	2	0	2	0	3	0	11	0.			windmill grass 30-70% nekel Rd at 1.3km end section - see Roberts Rd survey
Osbourne Rd	3050372	4	1.3	2.1	0.8	E	cnr McLeod Rd		1- 5m	1-5m	2	0	2	0	2	0	2	0	3	0	11	0			
Owingup Rd East	3050091	1	0	1.2	1.2	Е	Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			end at bridge which may not support vehicle.
Owingup Rd West	3050460	1	0	0.7	0.7	W	Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Owingup Rd West	3050460	2	0.7	2.3	1.6	W	Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Owingup Rd West	3050460	3	2.3	3.1	0.8	W	Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			end where Rd becomes untraversable
Parker Rd	3050016	1	0	1.7	1.7	N			1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9		Kikuyu Annual grass	
Parker Rd	3050016	2	1.7	2.6	0.9	N			1- 5m	1-5m	2	0	2	0	2	1	2	0	3	0	11	1	Watsonia	Kikuyu Annual grass	
Parker Rd	3050016	3	2.6	3.1	0.5	N			1- 5m	1-5m	2	2	2	1	2	2	2	2	3	3	11	10		Kikuyu	
Parker Rd	3050016	4	3.1	4.2	1.1	N			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10	Watsonia	Kikuyu	
Parker Rd	3050016	5	4.2	4.9	0.7	N			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10	Watsonia	Kikuyu	
Parker Rd	3050016	6	4.9	5.8	0.9	N			1- 5m	1-5m	0	0	0	0	1	1	0	0	0	0	1	1	Watsonia	Kikuyu	
Parker Rd	3050016	7	5.8	6.6	0.8	N			1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10		Kikuyu	
Parker Rd	3050016	8	6.6	7.1	0.5	Е	8		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	e c	Kikuyu	
Parker Rd	3050016	9	7.1	8.6	1.5	SE		Scot sdal e Rd	1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		Kikuyu	
Parry Beach Rd	3050009	1	0	0.4	0.4	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	1	1	7	7		Annual grass Capeweed Wild Oat Annual Veldt Grass	12

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Interse	ction		lidth of getation	Ve	tent of egetati	# of N pla spe	ant	General W	eeds	Na Vege	tive tation		oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
		140	(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	COMPANIA		
Parry Beach Rd	3050009	2	0.4	0.7	0.3	S	South Coast Hwy		1- 5m	1-5m	1	1	1	-1	2	2	2	2	1	1	7	7		Annual grass Capeweed Wild Oat Annual Veldt Grass Wild Gladiolus Stinkwort	
Parry Beach Rd	3050009	3	0.7	1.2	0.5	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	1	1	7	7	Watsonia	Annual grass Capeweed Wild Oat Annual Veldt Grass Wild Gladiolus Stinkwort	
Parry Beach Rd	3050009	4	1.2	2.1	0.9	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	_1	8	7	Watsonia	Annual grass Capeweed Wild Oat Annual Veldt Grass Wild Gladiolus Stinkwort	
Parry Beach Rd	3050009	5	2.1	2.4	0.3	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	1	8	7		Annual grass Wild Oat	
Parry Beach Rd	3050009	6	2.4	2.9	0.5	SE	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	. 1	8	7	Watsonia	Annual grass Wild Oat Annual Veldt Grass Kikuyu	
Parry Beach Rd	3050009	7	2.9	3.4	0.5	SE	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	1	8	7	Watsonia	Annual grass Wild Oat Annual Veldt Grass Kikuyu	
Parry Beach Rd	3050009	8	3.4	4	0.6	SW	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	1	8	7	Watsonia	Wild Oat	
Parry Beach Rd	3050009	9	4	6.3	2.3	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	1	8	7		Wild Oat	
Pates Rd	3050063	1	0	0.2	0.2	S	South Coast Hwy		1- 5m	1-5m	0	1	0	1	1	2	0	2	0	0	1	6	Watsonia	Annual grass Kikuyu	
Pates Rd	3050063	2	0.2	0.3	0.1	S	South Coast Hwy		1- 5m	1-5m	0	0	0	0	1	0	1	0	0	0	2	0	Watsonia	Annual grass Kikuyu Fleabane	Purple. Pea weed Pennyroyal Fog grass
Pates Rd	3050063	3	0.3	0.000			South Coast Hwy		1- 5m	1-5m	1	0	0	0	1	0	2	1	0	1	4	2	Watsonia	Annual grass Kikuyu Thistle Dolichos Pea	
Pates Rd	3050063	4	0.5	0.6	0.1	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	.1	1	1	1	1	1	5	5	Watsonia	Annual grass Kikuyu Thistle	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation	Ve	tent of getati	pl	Native ant cies	General V	Veeds		ative etation	200	bitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Pates Rd	3050063	5	0.6	0.8	0.2	S	South Coast Hwy		1- 5m	1-5m	2	2	2	2	2		2	2	2	2	10	10	Watsonia	Annual grass Kikuyu Arum Lily	
Pates Rd	3050063	6	0.8	11.3	10.5	S	South Coast Hwy		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10	Watsonia	Annual grass Kikuyu Arum Lily Capeweed Wild Oat Dolichos Pea	Blowfly grass
Pates Rd	3050063	7	1.3	1.5	0.2	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	1	1	2	2	1	1	6	6		Annual grass Kikuyu Arum Lily Capeweed Wild Oat Dolichos Pea	Pelargonium
Pates Rd	3050063	8	1.5	2.1	0.6	S	South Coast Hwy		1- 5m	1-5m	1	1	1	1	1	1	2	2	1	1	6	6	Watsonia	Annual grass Kikuyu Wild Oat Annual Veldt Grass Bridal Creeper	Oxalis Blowfly grass Wild oats
Pates Rd	3050063	9	2.1	2.2	0.1	S	South Coast Hwy		1- 5m	1-5m	1	-1	0	0	1	1	1	1	1	1	4	4	Watsonia	Annual grass Kikuyu Wild Oat Annual Veldt Grass Bridal Creeper	Oxalis Blowfly grass Wild oats
Peace St	3050428	1	0	0.7	0.7	W	Mt Shadforth		1- 5m	1-5m	1	1	1	1	1	1	2	2	3	3	8	8	African Love Grass Watsonia	Annual grass	
Peace St	3050428	2	0.7	1.2	0.5	W	Kerr Close		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass	urban area Kikuyu under Karri
Peace St	3050428	3	1.2	1.4	0.2	SW	roundabo ut		1- 5m	1-5m	0	0	0	0	0	0	0	1	0	1	0	2		Annual grass	urban area Kikuyu under Karri
Peace St	3050428	4	1.4	1.8	0.4	W	Jasper Rd		1- 5m	1-5m	0	1	1	1	0		2		3	3	6	7	African Love Grass Watsonia	cw V	urban area Kikuyu under Karri Rd surveyed in correct direction continuation of surveys 1158-1160
Peace St	3050428	5	1.8	2.2	0.4	W	Jasper Rd		1- 5m	1-5m	0	0	1	0	0	0	2	0	3	0	6	0	African Love Grass Watsonia	Annual grass Baboon Flower	urban area Kikuyu under Karri

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion	W Ve	idth of getation	Ve	tent of getati on		Native ant cies	General W	eeds		tive tation		oitat	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
		-	(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Peace St	3050428	6	2.2	2.8	0.6	NE	Tomkin Rd		1- 5m	1-5m	0	0	0	0	0	0	0	0	1	1	1	1	African Love Grass Watsonia	Annual grass Baboon Flower	urban area Kikuyu under Karri
Peaceful Bay North Rd (known locally as Peaceful Bay Rd	3050385	1	0	1.1	1.1	S	Peaceful Bay Rd	Ram e Hea d Rd	Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed	Senecio Elegans Rd verge cnr Old Peaceful Bay
Peaceful Bay Rd	3050386	1	0	6.5	6.5	S	South Coast Hwy		Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed Dock Wild Oat	
Peaceful Bay Rd	3050386	2	6.5	7.8	1.3	S		Pea ceful Bay Nth Rd	Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed	Senecio Elegans Rd verge cnr Old Peaceful Bay
Peaceful Bay Rd	3050386	3	7.8	9.4	1.6	S	loop Rd town		Unk now n	Unknow n	2	2	2	2	2	2	2	2	2	2	11	11		Annual grass Capeweed Wild Pines	
Pitt Rd	3050066	1	0	0.2	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	0	1	2	2	2	2	2	0	0	6	6		Wild Oat	
Pitt Rd	3050066	2	0.2	0.5	0.3	SE	main Rd? - South Coast Highway		1- 5m	1-5m	1	0	1	0	2	2	2	0	0	0	6	2		Wild Oat	,
Pitt Rd	3050066	3	0.5	0.7	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	0	1	0	2	2	2	0	0	0	6	2	Watsonia	Wild Oat	
Pitt Rd	3050066	4	0.7	1	0.3	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	1	1	0	2	2	2	2	0	1	6	6	Watsonia	Arum Lily Thistle	
Pitt Rd	3050066	5	1	1.2	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	1	1,	0	2	2	2	2	0	0	6	5	Watsonia	Arum Lily Thistle Wild Oat	
Pitt Rd	3050066	6	1.2	1.4	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	1	1	0	2	2	2	2	0	1	6	6		Kikuyu	(5)
Pitt Rd	3050066	7	1.4	1.6	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	0	1	0	2	2	2	0	1	0	7	2		Kikuyu	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation		tent of egetati	pl	Native ant cies	General W	leeds		tive tation	10000000	oitat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	-	· L	R	L	R	L	R	L	R	L	R	Combined		
Pitt Rd	3050066	8	1.6	1.8	0.2	S	main Rd? - South Coast Highway		1- 5m	1-5m	1	1	1	1	2	2	2	2	1	1	7	7		Kikuyu	
Pitt Rd	3050066	9	1.8	2.2	0.4	SE	main Rd? - South Coast Highway		1- 5m	1-5m	1	1	1	1	2	2	2	2	1	1	7	7			
Pitt Rd	3050066	10	2.2	2.5	0.3	SE	main Rd? - South Coast Highway		1- 5m	1-5m	2	2	1	1	2	2	2	2	1	1	8	8			
Pitt Rd	3050066	11	2.5	2.7	0.2	SE	main Rd? - South Coast Highway		1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10			
Pittam Rd	3050246	2	0.3	0.5	0.2	E	Illsley drive		1- 5m	1-5m	0	0	2	2	0	0	2	2	0	0	4	4	Sydney Golden Wattle	Annual grass Kikuyu Wild Pines Eastern States Eucalyptus Species	Finished at Pate property
Plozza Road	3050235	1	0	0.3	0.3	W	Parry Beach Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	1	1	7	7	Watsonia	Wild Oat Wild Gladiolus Thistle Arum Lily	
Plozza Road	3050235	2	0.3	0.5	0.2	W	Parry Beach Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	1 4 5 6	1	7	7	Watsonia	Wild Oat Wild Gladiolus Thistle Arum Lily	
Plozza Road	3050235	3	0.5	0.8	0.3	S	Parry Beach Rd		1- 5m	1-5m	0	1	1	1	2	2	2	2	1	1	6	7		Wild Oat Wild Gladiolus Arum Lily Kikuyu	÷
Plozza Road	3050235	4	0.8	1.3	0.5	W	Parry Beach Rd		1- 5m	1-5m	0	1	3) 1.	1	2	2	1	2	0	0	4	6		Wild Oat	
Point Hillier Vista	3050418	1	0	0.2	0.2	NW	Limbourn e Rd		1- 5m	1-5m	2	2	1	1	2	2	2	2	2	1	9	8			
Point Hillier Vista	3050418	2	0.2	0.6	0.4	NW	Limbourn e Rd		1- 5m	1-5m	2	0	1	0	2	1	2	1	2	1	9	3	Watsonia	Eastern States Eucalyptus Species	
Point Hillier Vista	3050418	3	0.6	2.1	1.5	NW	Limbourn e Rd		1- 5m	1-5m	0	0	0	0	0	0		0	0	0	0	0		Eastern States Eucalyptus Species Annual grass Watsonia Kikuyu	
Porch Rd	3050165	1	0	1.3	1.3	W	Suttons Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	-11	11			

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation		tent of egetati	pl	Native ant cies	General W	leeds		tive tation	100000	oitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Porch Rd	3050165	2	1.3	2.3	1	NW	Suttons Rd		1- 5m	1-5m	0	2	1	2	2	2	1	2	0	3	4	11			
Powleys Rd	3050074	1	0	0.2	0.2	W	Mt Barker Rd		5- 20m	5-20m	2	2	2	2	2	2	2	2	2	2	11	- 11			
Powleys Rd	3050074	2	0.2	0.9	0.7	W	Mt Barker Rd		1- 5m	5-20m	2	2	2	2	2	2	2	2	2	2	10	11		1	
Powleys Rd	3050074	3	0.9	1.2	0.3	W	Mt Barker Rd		5- 20m	5-20m	2	2	2	2	2	2	2	2	3	2	12	11			
Pratt Rd	3050041	1	0	1.9	1.9	N	South Coast Hwy		>20 m	1-5m	2	2	2	2	2	2	2	2	3	3	12	11			
Randall Rd	3050276	1	0	0.2	0.2	SW	South Coast Hwy		1- 5m	1-5m	2	2	1	1	2	2	2	2	2	2	9	9			
Randall Rd	3050276	2	0.2	0.4	0.2	SW	South Coast Hwy		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Randall Rd	3050276	3	0.4	0.7	0.3	SW	South Woodwar d Hts		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			D2
Randall Rd	3050276	4	0.7	1.1	0.4	SW			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Randall Rd	3050276	5	1.1	1.3	0.2	SE			1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10	4		Dieback noted in this small section
man Rd	3050029	1	0	1.5	1.5	S			1- 5m	1-5m	1	1	1	1	2	1	2	2	2	2	8	7	Watsonia	Asparagus Annual grass	
man Rd	3050029	2	1.5	2.1	0.6	S			1- 5m	1-5m	1	1	1	1	2	1	2	2	2	2	8	7	Watsonia	Asparagus Annual grass	
man Rd	3050029	3	2.1	2.6	0.5	W			1- 5m	1-5m	1	1	1	1	2	1	2	2	2	2	8	7	Watsonia	Asparagus Annual grass	
man Rd	3050029	4	2.6	3.2	0.6	W			1- 5m	1-5m	1	1	1	1	2	1	2	2	2	2	8	7	Watsonia	Asparagus Annual grass	
man Rd	3050029	5	3.2	4	0.8	W			1- 5m	1-5m	1	1	1	1	2	1	2	2	2	2	8	7	Watsonia	Asparagus Annual grass	
man Rd	3050029	6	4	4.5	0.5	W		Walt er Rd	1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Asparagus Annual grass	
Rice Rd	3050067	1	0	0.1	0.1	SW	main Rd? - South Coast Highway		1- 5m	1-5m	2	1	1	1	2	2	2	2	2	1	9	7			
Rice Rd	3050067	2	0.1	0.6	0.5	SW	main Rd? - South Coast Highway		1- 5m	1-5m	2	1	1	1	2	2	2	0	2	. 0	9	4		Wild Oat Kikuyu Thistle	
Richardson Rd	3050520	1	0	0.26	0.26	W			1- 5m	1-5m	1	1	1	1	2	2	2	2	0	0	6	6		Kikuyu Capeweed	Fog grass
Richardson Rd	3050520	2	0.26	0.46	0.2	W	4		1- 5m	1-5m	1	1	1	1	2	2	2	2	0	0	6	6		Kikuyu Capeweed	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		idth of getation	Ve	tent of getati	pl	Native ant cies	General W	leeds		tive tation	1000,5300	oitat ures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Richardson Rd	3050520	3	0.46	0.76	0.3	W			1- 5m	1-5m	1	1	1	1	. 2	2	2	2	0	0	6	6		Kikuyu Capeweed	-
Richardson Rd	3050520	4	0.76	0.96	0.2	W			1- 5m	1-5m	1	1.	0	1	1	2	2	2	0	0	4	6		Kikuyu Annual grass	
Richardson Rd	3050520	5	0.96	1.26	0.3	W			1- 5m	1-5m	1	1	0	0	1	1	2	2	0	0	4	4		Kikuyu Annual grass	
Richmond Rd	3050082	1	0	1	1	S	Mount Lindsay		>20 m	>20m	2	2	2	2	2	2	2	2	3	3	12	12			Finishes at Southerland property
Roberts Rd	3050034	1	0	0.6	0.6	SW	cnr Scotsdal e Rd		1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10			
Roberts Rd	3050034	2	0.6	0.9	0.3	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	2	1	1	1	2	1	1	3	3	7	9	Watsonia		
Roberts Rd	3050034	3	0.9	1.4	0.5	SW	cnr Scotsdal e Rd		1- 5m	1-5m	0	1	0	0	0	1	0	2	0	2	0	6	Watsonia	Kikuyu	
Roberts Rd	3050034	4	1.4	. 2	0.6	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	2	1	1	1	2	2	2	3	2	8	9			
Roberts Rd	3050034	5	2	2.3	0.3	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	2	1	1	1	2	2	2	3	2	8	9		Fleabane	
Roberts Rd	3050034	6	2.3	2.8	0.5	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	2	1	1	1	2	2	2	3	2	8	9		Fleabane	161
Roberts Rd	3050034	7	2.8	3.2	0.4	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	2	1	1	1	2	2	2	3	2	8	9	Watsonia	Fleabane	
Roberts Rd	3050034	8	3.2	3.5	0.3	SW	cnr Scotsdal e Rd		1- 5m	1-5m	1	0	1	0	1	0	2	1	3	0	8		Watsonia	Fleabane	nekel Rd @ 3.4km
Roberts Rd	3050034	9	3.5	4.2	0.7	SW	cnr Scotsdal e Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			Glenrowan Rd @ 3.5km
Roberts Rd	3050034	10	4.2	4.4	0.2	SW	cnr Scotsdal e Rd		1- 5m	1-5m	0	2	0	2	0	2	0	2	0	3	0	11			
Roberts Rd	3050034	11	4.4	4.8	0.4	SW	cnr Scotsdal e Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11			end at osbourne Rd and nekel. unsure if this is still roberts Rd?
Roberts Rd	3050034	12	4.8	5.2	0.4	W			1- 5m	1-5m	0	2	0	2	0	2	0	2	0	3	0	11			
Rugyard Rd	3050277	1	0	1	1	W	Crusoe Beach Rd		>20 m	1-5m	2	2	2	2	2	2	2	2	3	2	12	10	Watsonia	Annual grass Dock Kikuyu Thistle	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation	Ve	tent of getati on	# of N pla spe	ant	General W	leeds	Nat Veget		- COOP //	oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			- 8
Saggers Rd (Listed as monds Rd)	3050326	1	0	1,1	1.1	E	intersecti on with Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	0	1	8	9	Watsonia	Wild Oat	
Saggers Rd (Listed as monds Rd)	3050326	2	1.1	2.7	1.6	E	intersecti on with Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	1	1	9	9			
Saggers Rd (Listed as monds Rd)	3050326	3	2.7	3.2	0.5	E	intersecti on with Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Saggers Rd (Listed as monds Rd)	3050326	4	3.2	3.4	0.2	E	intersecti on with Board Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10		Annual grass	
Scotsdale Rd	3050001	1	0.45	1.25	0.8	N	town		1- 5m	1-5m	0	0	0	0	0	0	0	0	0	0	0	0	Watsonia		
Scotsdale Rd	3050001	2	1.25	1.95	0.7	N	town		1- 5m	1-5m	0	0	2	2	2	2	2	2	2	2	8	8	Watsonia	Kikuyu	
Scotsdale Rd	3050001	3	1.95	2.65	0.7	N	town		1- 5m	1-5m	1	1	1	1	1	1	2	2	2	2	7	7	Watsonia	Kikuyu Fleabane	riverbend lane @ 1.5km
Scotsdale Rd	3050001	4	2.65	3.85	1.2	N	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		7.10400110	riverbend lane @ 1.5km
Scotsdale Rd	3050001	5	3.85	4.35	0.5	N	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia	Kikuyu Fleabane	man Rd @ 3.6km howe Rd @3.9km
Scotsdale Rd	3050001	6	4.35	5.15	0.8	N	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11		Kikuyu Fleabane	
Scotsdale Rd	3050001	7	5.15	5.55	0.4	N	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia	Kikuyu Fleabane	
Scotsdale Rd	3050001	8	5.55	6.55	1	N	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia	Kikuyu Fleabane	
Scotsdale Rd	3050001	9	6.55	7.75	1.2	N .	town		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia	Kikuyu Fleabane	
Scotsdale Rd	3050001	10	7.73	11.4	3.7	W	Mt Lindsay Rd		1- 5m	1-5m	0	2	0	2	1	2	2	2	3	3	6	11	Watsonia Pittosporum Sydney Golden Wattle Taylorina Victorian Tea Tree	Kikuyu	scotsdale tennis courts
Scotsdale Rd	3050001	11	11.4 3	13.4	2	NW	Harewoo d Forest Walk		1- 5m	1-5m	0	2	0	2	1	2	2	2	3	3	6	11	African Love Grass Watsonia Pittosporum Sydney Golden Wattle Taylorina	Annual grass Kikuyu Wild Oat	
Scotsdale Rd	3050001	12	13.4 3	14.4	0.9	S	Roberts Rd		1- 5m	1-5m	1	2	2	1	1	1	2	2	3	2	9	8	Watsonia Pittosporum		

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		lidth of getation	Ve	tent of egetati on	pla	lative ant cies	General W	eeds	Nat Veget		5106525	oitat cures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Scotsdale Rd	3050001	13	14.3 5	14.9	0.5	W	Harewoo d Rd?	5(4)	1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia	Kikuyu Annual grass	
Scotsdale Rd	3050001	14	14.8 6	16.4	1.5	SW			1- 5m	5-20m	1	2	1	2	2	2	2	2	2	3	8	12	Watsonia	Kikuyu Annual grass	
Scotsdale Rd	3050001	15	16.3 6	19.7	3.3	SW			1- 5m	1-5m	2	2	2	2	2	2	2	2	3	3	11	11	Watsonia	Kikuyu Annual grass	
Scotsdale Rd	3050001	16	19.6 6	20.2	0.5	SW		McL eod Rd	1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8		Kikuyu Annual grass	
Scotsdale Rd	3050001	17	20.1	21.4	1.2	W	McLeod Rd		1- 5m	1-5m	1	1	0	0	2	2	2	2	2	2	7	7	Watsonia	Kikuyu	
Scotsdale Rd	3050001	18	21.3	21.9	0.5	W			1- 5m	1-5m	0	1	0	0	1	2	1	2	0	2	2	7	Watsonia	Kikuyu	
Scotsdale Rd	3050001	19	21.8	22.5	0.6	W			1- 5m	1-5m	0	0	0	0	0	0	0	0	0	0	0	0	Watsonia	Kikuyu Thistle Eastern States Eucalyptus Species	
Scotsdale Rd	3050001	20	22.4 6	24.2	1.7	NW			1- 5m	1-5m	0	0	0	0	2	2	2	2	2	2	6	6	Watsonia	Eastern States Eucalyptus Species	
Scotsdale Rd	3050001	21	24.1 6	24.8	1.2	NW			1- 5m	1-5m	1	1	1	1	2	2	2	2	3	3	9	9	Watsonia		
Scotsdale Rd	3050001	22	24.7 7	25.5	0.7	NW	McLeod Rd		1- 5m	1-5m	0	2	0	2	1	2	0	2	0	2	1	10	Watsonia Victorian Tea Tree	Kikuyu Wild Oat Thistle	
Scotsdale Rd	3050001	23	25.4 7	26.8	1.3	NW			1- 5m	1-5m	0	0	0	0	1	0	0	0	0	0	1	0	Watsonia	Kikuyu Eastern States Eucalyptus Species	
Scotsdale Rd	3050001	24	26.7 7	28	1.2	W			1- 5m	1-5m	1	2	1	1	2	2	2	2	2	2	8	9	Watsonia		extensive slashed firebreak on left on Rd reserve.
Scotsdale Rd	3050001	25	27.9 7	29.4	1.4	NW			1- 5m	1-5m	0	2	0	2	2	2	0	2	0	3	2	11	Watsonia		
Scotsdale Rd	3050001	26	29.3 7	31.4	2	NW			1- 5m	1-5m	0	1	0	1	2	2	0	2	0	2	2	8	Watsonia	Kikuyu	
Scotsdale Rd	3050001	27	31.3 7	32.1	0.7	NW			1- 5m	1-5m	0	1	0	1	1.	2	0	2	0	1	1	7	Watsonia	Kikuyu	
Scotsdale Rd	3050001	28	32.0 7	33.4	1.3	SW		Park er Rd	1- 5m	1-5m	1	1	1	1	1	2	2	2	2	2	7	8	Watsonia	Kikuyu	right reserve cleared during farm fencing
Settlers Rd	3050075	1	0	1.2	1.2	W	Mt Barker Rd		1- 5m	5-20m	2	2	2	2	2	2	2	2	3	2	11	11	Watsonia		
Settlers Rd	3050075	2	1.2	1.9	0.7	W	Mt Barker Rd	-	1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10		Kikuyu	
Settlers Rd	3050075	3	1.9	2.3	0.4	N	Mt Barker Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10		Kikuyu Wild Gladiolus	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersect	ion		idth of getation	Ve	tent of getati	pl	Vative ant cies	General W	eeds	Nat Vege		Hab Feat	itat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Combined		
Skipping Rd	3050072	1	0	0.8	0.8	NW	Kordabup Rd		1- 5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia	Kikuyu Annual grass Wild Oat Dock	
Skipping Rd	3050072	2	8.0	1.6	8.0	NW	Kordabup Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Skipping Rd	3050072	3	1.6	1.9	0.3	NW	Kordabup Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Skipping Rd	3050072	4	1.9	2.4	0.5	NW	Kordabup Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	3	10	11		Capeweed Annual grass	
Skipping Rd	3050072	5	2.4	2.7	0.3	N	Kordabup Rd		1- 5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10		7 mildir grado	
Stan Rd	3050076	1	0	0.7	0.7	N	Churchhil IRd		1- 5m	1-5m	0	0	0	0	0	0	1	1	1	1	2	2	Sydney Golden Wattle	Kikuyu Capeweed	
Station Rd	3050059	1	0	0.6	0.6	S	South Coast Hwy		1- 5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1	African Love Grass	Annual grass Capeweed SowThistle	Knotweed weed Flatweed
Station Rd	3050059	2	0.6	1.3	0.7	S	South Coast Hwy		5- 20m	5-20m	1	-	1	1	1	1	2	2	0	0	6	6	African Love Grass	Annual grass SowThistle Wild Oat Nightshade Thistle	
Station Rd	3050059	3	1.3	2.3	1	S	Bellanger Rd		5- 20m	5-20m	1	2	1	1	1	1	2	2	0	2	6	9	African Love Grass	Annual grass SowThistle Wild Oat Thistle Nightshade Capeweed	Dolichos pea major problem opposite station house clearing
Station Rd	3050059	4	2.3	2.5	0.2	E			5- 20m	5-20m	1	2	1	1	1	1	2	2	0	2	6	9	African Love Grass	SowThistle	
Station Rd	3050059	5	2.5	4.4	1.9	E			5- 20m	5-20m	1	1	1	1	1	1	2	2	2	2	8	8		SowThistle	
Styx River Rd	3050211	1	0	0.6	0.6	NE	Femley Rd		1- 5m	1-5m	1	1	1	1	1	2	2	2	1	2	6	8	Watsonia	Thistle Kikuyu Annual grass	
Styx River Rd	3050211	1	1.3	2	0.7	N	Femley Rd		1- 5m	Unknow	0	2	1	2	2	2	2	2	2	1	7	10	Watsonia	, man grace	
Sunny Glen Rd	3050040	1	0	0.5	0.5	N	South Coast Hwy		1- 5m	1-5m	1	2	1	1	1	2	2	2	2	3	7	10	Watsonia		
Sunny Glen Rd	3050040	2	0.5	2.2	1.7	N	South Coast Hwy		>20 m	1-5m	2	2	2	1	2	2	2	2	3	3	12	10		Annual grass	
Sunny Glen Rd	3050040	3	2.2	3.9	1.7	NE	South Coast Hwy		1- 5m	1-5m	2	2	1	1	2	2	2	2	3	3	10	10		Annual grass	
Sunny Glen Rd	3050040	4	3.9	4.3	0.4	NE	South Coast Hwy		1- 5m	1-5m	2	2	1	1	2	2	2	2	2	3	9	10		Annual grass	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		th of tation	Ve	tent of getati on	pla	Native ant cies	General V	Veeds		tive tation	Hab Feat	Market Co.	Value	ervation e Score 1-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Sunny Glen Rd	3050040	5	4.3	4.8	0.5	NE	South Coast Hwy		>20m	1-5m	2	2	2	1	2	2	2	2	3	3	12	10		Annual grass	
Sunny Glen Rd	3050040	6	4.8	6.5	1.7	N	South Coast Hwy		>20m	1-5m	2	2	2	1	2	2	2	2	3	3	12	10		Annual grass	
Sunny Glen Rd	3050040	- 7	6.5	7.2	0.7	N	South Coast Hwy		1-5m	1-5m	2	2	1	1	2	2	2	2	2	3	9	10		Annual grass	
Sunny Glen Rd	3050040	8	7.2	7.9	0.7	N	South Coast Hwy		>20m	>20m	2	2	2	1	2	2	2	2	3	3	12	11		Annual grass	
Sunny Glen Rd	3050040	9	7.9	8.1	0.2	NE	South Coast Hwy		>20m	>20m	2	2	2	1	2	2	2	2	3	3	12	11		Annual grass	1
Sunrise Rd	3050021	1	0	1.05	1.05	NE	,		1-5m	1-5m	2	2	2	2	2	2	2	2	2	1	10	9		Kikuyu Annual grass	
Sunrise Rd	3050021	2	1.05	1.95	0.9	NE			1-5m	1-5m	0	2	0	1	1	2	2	2	1	0	4	7		Annual grass Kikuyu	
Sunrise Rd	3050021	3	1.95	2.55	0.6	NE		Mt Sha dfort h Rd	1-5m	1-5m	1.	1	0	1	1	1	2	2	0	0	4	5		Annual grass	
Swallow Rd (Crosby's Rd on MRWA Rd list)	3050164	1	0	1.2	1.2	E	Parker Rd	1110	1-5m	1-5m	1	2	1	2	2	2	2	2	2	2	8	10	Watsonia	Kikuyu Thistle	
Tame close	3050433	1	0	0.1	0.1	NE	Knowles Rd		1-5m	1-5m	0	0	0	0	1	1	1	1	0	0	2	2	Watsonia	Annual grass Kikuyu	Finishes at private property
Tearle court	3050452	1	0	0.2	0.2	W	Collins Place		1-5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at private property
Tindale Rd	3050007	1	0	0.6	0.6	N	South West Hwy		1-5m	1-5m	1	2	0	2	1	2	2	2	0	3	4	11	African Love Grass Watsonia	Annual grass Wild Gladiolus Wild Oat	some bands of v. young plantation tree in pastures
Tindale Rd	3050007	2	0.6	2.3	1.7	N	South West Hwy		1-5m	1-5m	1	2	1	2	2	2	2	2	1	3	7	11	African Love Grass	Annual grass Wild Gladiolus Wild Oat Capeweed	Pelargonium
Tindale Rd	3050007	3	2.3	3	0.7	N	South West Hwy		1-5m	1-5m	1 - 3 - X 2	2	2	2	2	2	2	2	1	3	8	11	Watsonia	Wild Oat Annual grass	recent cleared patches of v. young plamtation trees in adjoiningg land

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion	Wid: Vege			tent of egetati	pl	Native ant ecies	General W	eeds	100000000000000000000000000000000000000	tive tation	Hab Feat	oitat ures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Tindale Rd	3050007	4	3	3.9	0.9	N	South West Hwy		1-5m	1-5m	1	1	2	1	1	1	2	2	2	3	8	8	African Love Grass	Wild Oat Annual grass Kikuyu Nightshade SowThistle Thistle	Oxalis carnata, Flatweed,Lotu s,
Tindale Rd	3050007	5	3.9	4.5	0.6	N	South West Hwy		1-5m	1-5m	1	1	1	1	1	1	2	2	2	3	7	8	African Love Grass	Wild Oat Annual grass Kikuyu Wild Gladiolus Tagasaste	Flatweed,
Tindale Rd	3050007	6	4.5	4.7	0.2	N	South West Hwy		1-5m	1-5m	1	1	1	1	1	1	2	2	2	3	7	8		Wild Oat Annual grass	Flatweed,
Tindale Rd	3050007	7	4.7	5.2	0.5	N	South West Hwy		1-5m	1-5m	0	1	0	2	1	2	2	2	2	3	5	10		Annual grass Wild Gladiolus SowThistle	Flatweed,
Tindale Rd	3050007	8	5.2	6.2	1	N	South West Hwy		1-5m	1-5m	2	1	2	1	2	1	2	2	2	3	10	8		Annual grass Wild Gladiolus	Flatweed,
Tindale Rd	3050007	9	6.2	8.5	2.3	N	South West Hwy		1-5m	1-5m	2	1	2	1	2	1	2	2	2	3	10	8		Annual grass Wild Oat SowThistle Thistle	Flatweed, Apple tree, Blackberry
Tindale Rd	3050007	10	8.5	10.1	1.6	N	South West Hwy		Unkno wn	Unkn own	2	2	2	2	2	2	2	2	3	3	12	12		Annual grass	Fleabane
Tindale Rd	3050007	11	10.1	12	1.9	N	South West Hwy		Unkno wn	1-5m	2	1	2	2	2	2	2	2	3	3	12	10		Annual grass Capeweed Kikuyu SowThistle Thistle Wild Oat	Blackberry, Mentha, Flatweed, Nightshade ended at northumberla nd Rd.
Tomkin Drive	3050513	1	0	0.2	0.2	W	Peace Street		1-5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at Edwards street
Tulley Rd	3050392	1	0	0.3	0.3	W	Mt Barker Rd		1-5m	1-5m	2	2	2	2	2	2	2	2	2	1	10	9			0.000
Tumer Rd	3050028	1	0	1.6	1.6	N	Mount Shadforth Rd		1-5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia	Annual grass Kikuyu	
Tumer Rd	3050028	2	1.6	2.5	0.9	N			1-5m	1-5m	1	1	1	1	2	2	2	2	2	2	8	8	Watsonia	Annual grass Kikuyu	
Valley of the Giants Rd	3050006	1	0	5	5	NE	South Coast Hwy		Unkno wn	Unkn own	2	2	2	2	2	2	2	2	3	3	12	12			
Valley of the Giants Rd	3050006	2	5	6	1	NE	South Coast Hwy		Unkno wn	Unkn own	2	2	2	2	2	2	2	2	3	3	12	12			

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion	Widt Veget			tent of egetati	pl	Native ant ecies	General W	/eeds		tive tation	C-ALDED	oitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Combined		
Valley of the Giants Rd	3050006	3	6	7	1	NE	Bruin Rd		Unkno wn	Unkn	2	2	2	2	2	2	2	2	3	3	12	12	Watsonia		
Valley of the Giants Rd	3050006	4	7	9	2	NE	Bruin Rd		5-20m	5- 20m	1	1	1 14	1	1	1	2	2	1	1	7	7	Watsonia	Dock Wild Gladiolus Golden Crown beard Kikuyu Nightshade Wild Oat	
Valley of the Giants Rd	3050006	5	9	12	3	NE	Hazelval e Rd		5-20m	5- 20m	0	0	0	0	0	0	2	2	1	1	4	4	Watsonia	Dock Wild Gladiolus Kikuyu Nightshade Wild Oat Thistle	Knot weed Pine planted Karri
Valley of the Giants Rd	3050006	6 -	12	14	. 2	NE	Vigus Rd		>20m	1-5m	2	0	2	0	2	1	2	2	3	2	12	5	Watsonia	Kikuyu Wild Oat	Knot weed
Valley of the Giants Rd	3050006	7	14	16	2	NE	Vigus Rd		1-5m	1-5m	0	0	1	1	0	0	2	2	2	2	5	5	Watsonia	Kikuyu Wild Oat	
Valley of the Giants Rd	3050006	8	16	18	2	S	Vigus Rd		1-5m	1-5m	2	2	0	0	2	2	1	1	3	3	8	8		Wild Oat	
Vermeulen Rd	3050097	1	2.4	2.6	0.2	N			1-5m	1-5m	2	2	1	1	2	2	2	2	0	0	7	7	Watsonia		
Vermeulen Rd	3050097	2	2.6	2.8	0.2	N			Unkno	1-5m	0	0	0	0	1	1	1	2	3	0	6	3	Watsonia		
Vermeulen Rd	3050097	3	2.8	3.9	1.1	N		Vall ey of the Gian ts Rd	Unkno wn	1-5m	2	2	0	0	1	1	1	2	3	0	8	5	Watsonia	ac 34	
View Rd		1	0	0.8	0.8	S	Mt Shadforth Rd		1-5m	1-5m	1	1	1	1	1	1	2	2	1	1	6	6		Kikuyu Annual grass Eastern States Wattles	Not listed on MRWA database, so will not be plotted on map
View Rd		2	0.8	1.2	0.4	S	Mt Shadforth Rd		1-5m	1-5m	0	0	0	0	0	0	2	2	0	0	2	2		Kikuyu Annual grass Eastern States Wattles	Not listed on MRWA data base, so will not be plotted on map
Vigus Rd	3050447	1	0		0.5	N	Valley of the Giants Rd		Unkno wn	1-5m	0	0	0	1	0	1	1	2	0	3	2	7	Watsonia	Kikuyu Thistle Nightshade Dock Arum Lily	knot weed
Vigus Rd	3050447	2	0.5	0.9	0.4	N	Valley of the Giants Rd		Unkno wn	1-5m	2	2	1	1	2	1	2	2	3	3	11	9	Watsonia	Wild Turnip	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	tion		th of tation	Ve	ent of getati	pla	lative ant cies	General W	eeds	Na Vege	tive tation		oitat tures	Valu	ervation e Score 0-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
			(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
Vigus Rd	3050447	3	0.9	1.5	0.6	N	Valley of the Giants Rd		Unkno	Unkn own	2	2	1	1	2	2	2	2	3	3	11:	11	Watsonia		
Vigus Rd	3050447	4	1.5	1.7	0.2	N	Valley of the Giants Rd		Unkno wn	Unkn own	2	2	1	1	2	2	2	2	3	3	11	1	Watsonia		
Walnut Grove	3050514	1	0	0.2	0.2	E	Peace Street		1-5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1		Annual grass Kikuyu	Finishes at cul-de-sac
Walter Rd	3050368	1	0	2	2	N	man Rd		1-5m	1-5m	1	. 1	2	2	1	1	2	2	3	3	9	9	Watsonia	Timeye	00, 00 000
Warham Rd	3050236	1	0	0.9	0.9	W	Mount Shadforth Rd		>20m	>20m	2	2	2	2	2	2	2	2	3	3	12	12	, radoma	Dolichos Pea	Finishes at private property
Watson Rd		1	0	1.2	1.2	W	Scotsdal e Rd		1-5m	1-5m	1	1	2	2	1	2	2	2	3	3	9	10	Watsonia	Asparagus Annual grass	Not listed on MRWA database, so will not be plotted on map
Wentworth Rd	3050210	1	. 0	0.3	0.3	S .	South Coast Hwy		1-5m	1-5m	2	2	2	2	2	2	2	2	3	2	111	10		Kikuyu Annual grass Wild Gladiolus	
Wentworth Rd	3050210	2	0.3	0.5	0.2	S			1-5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10	Watsonia		
Wentworth Rd	3050210	3	0.5	0.9	0.4	S			1-5m	1-5m	2	2	2	2	2	2	2	2	3	2	11	10		Annual grass Wild Gladiolus Kikuyu	
Wentworth Rd	3050210	4	0.9	1	0.1	S			1-5m	1-5m	0	2	2	2	0	2	0	2	0	2	2	10		Annual grass Kikuyu Thistle Nightshade	
Wentworth Rd	3050520	5	1	1.14	0.14	Е			1-5m	1-5m	1	1	1	1	2	2	2	2	0	0	6	6		Kikuyu Capeweed	Fog grass
Wentworth Rd	3050210	6	1.14	1.44	0.3	Е			0	0	1	1	0	0	2	2	2	2	0	0	5	5		Kikuyu Thistle Capeweed	Fog grass
Wentworth Rd	3050210	7	1.44	1.64	0.2	E			0	0	2	2	1	1	2	2	2	2	1	0	8	7		Kikuyu Eastern States Wattles	Fog grass
Wentworth Rd	3050210	8	1.64	1.84	0.2	E			0	0	0	1	0	1	1 No. 1	1	2	2	0	0	3	5		Kikuyu Eastem States Wattles	Vinca both sides
William Bay Rd	3050388	1	0	0.2	0.2	S	South Coast Hwy		5-20m	>20m	2	2	1	2	2	2	2	2	2	1	10	10			
William Bay Rd	3050388	2	0.2	0.6	0.4	S	South Coast Hwy		5-20m	5- 20m	2	2	1	1	2	2	2	2	2	3	10	.11		Annual grass	
William Bay Rd	3050388	3	0.6	0.8	0.2	SW	South Coast Hwy		5-20m	5- 20m	2	2	1	1	2	2	2	2	3	2	11	10		Annual grass Fumitory	

Road Name	Road Number	Sec tion #	OD Start	OD End	Dista nce	Dire ction	Intersec	ction		th of tation	Ve	tent of getati on	-	lative ant cies	General W	eeds	10000	tive tation	125	oitat tures	Valu	ervation e Score)-12)	Dominant Weeds Combined	Other Weeds Combined	Comments
	The state of the s		(km)	(km)	(km)		Start	End	L	R	L	R	L	R	L	R	L	R	L	R	L	R			
William Bay Rd	3050388	4	0.8	3.6	2.8	SW	South Coast Hwy		>20m	>20m	2	2	1	1	2	2	2	2	2	2	10	10		Veldt Grass	
William Bay Rd	3050388	5	3.6	3.9	0.3	S	South Coast Hwy		>20m	>20m	2	2	1	1	2	2	2	2	2	2	10	10			Pelargonium and Senecio
Williams Rd	3050080	1	0	1.5	1.5	N	Mt Lindsay Rd		>20m	>20m	2	2	2	2	2	2	2	2	3	3	12	12	Watsonia	Kikuyu	Finishes at Williams property
Wishart Close	3050247	1	0	0.3	0.3	NE	Illsley Drive		1-5m	1-5m	0	0	0	0	0	0	1	1	0	0	1	1	Sydney Golden Wattle	Annual grass Kikuyu Wild Pines Eastern States Eucalyptus Species	Finished at private property Rd #247 listed as Livesay Rd in MRWA State of Construction maps and Rd list
Woodward Hts	3050521	1	0	0.3	0.3	W	Randall Rd		1-5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Woodward Hts	3050521	2	0.3	0.6	0.3	SW			1-5m	1-5m	2	2	2	2	2	2	2	2	2	2	10	10			
Woylie Rd	3050354	1	0	0.5	0.5	N	Scotsdal e Rd		1-5m	1-5m	0	1	0	1	2	2	2	2	1	2	5	8	Watsonia	Annual grass	

Key to table interpretation:

OD Start/Finish: is the odometer reading for the section start and finish points.

<u>Direction</u>: is the direction travelled by the surveyors when assessing the roadside.

Width: is the width of the road reserve.

The following attributes are ranked from 0 (lowest level) to 2 (highest level) as per the descriptions below.

Native Vegetation: score based on the number of native vegetation layers present (ie) tree, shrub and/or ground cover layers.

Extent of Vegetation: score is based on the proportion of native vegetation in the total roadside vegetation.

#Native Plant Species: score is based on the diversity of plants species in the roadside vegetation.

Value as Biological Corridor: score is based on the number of roadside vegetation attributes present that are important as fauna habitat.

Adjoining Landuse: score is based on the extent of native vegetation in the surrounding landscape (higher scores indicate lower levels of native vegetation in the surrounding landscape).

Weeds: score is based on level of weed infestation (higher scores indicate lower levels of weed infestation).

Appendix

3

APPENDIX 3

THREATENED FLORA DEFINITIONS

What is Threatened Flora (Declared Rare Flora)?

- · Flora that is likely to become extinct, is rare or in need of special protection
- Protected under the Wildlife Conservation Act 1950
- · Declared as 'rare' by the minister for the environment
- Ministerial permission required to 'take' Threatened Flora
- 406 species listed as Threatened Flora in Western Australia
- · 10 Threatened Flora species known to occur within the Shire of Denmark

Threatened Flora is further divided into 3 categories (International Union for Conservation of Nature (IUCN) Criteria):

- Critically Endangered Extremely high risk of becoming extinct in the wild
- Endangered High risk of becoming extinct in the wild
- Vulnerable risk of becoming extinct in the wild

What is Priority Listed Flora?

- Flora that could potentially meet the criteria for Threatened Flora however is poorly known and in need of further survey
- · 2,706 species of priority flora in WA, 99 in the Shire of Denmark
- · Priority 1 Flora
 - Known from <5 populations which are under immediate threat. In urgent need of further survey
- Priority 2 Flora
 - Known from <5 populations which are under threat. At least one population occurs within conservation estate. In urgent need of further survey
- · Priority 3 Flora
 - Known from several populations (>5) that are not under immediate threat. The known populations are protected, widespread or large. In need of further survey.
- · Priority 4 Flora
 - Species that have been adequately surveyed and although rare are not under threat.
 Should be monitored every 5-10 years.
- Priority 5 Flora
 - Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened in five years.

(DEC, 2011 http://florabase.dec.wa.gov.au/conservationtaxa.php)

Appendix

4

APPENDIX 4

Flora species in the Shire of Denmark (Source: NatureMap, 2011)

Note: not a comprehensive list and may not be the most up to date information available.

NatureMap Species Report

Created By Guest user on 31/01/2011

Current Names Only Yes

Species Group All Plants

Method 'Predefined Area Intersect'

Area Type Shire Boundary

Intersect DENMARK

	Name ID	Species Name	Naturalised	Conservation Code 'Endemic To Query Area
1.	3207	Acacia alata (Winged Wattle)		
2.	15429	Acacia alata var. eleta		
3.	15466	Acacia applanata		
4.	3239	Acecie biflore		
5.	3247	Acacia browniana		
6.	11731	Acacia browniana var. browniana		
7.	11449	Acacia browniana var. endlicheri		
8.	3257	Acacia chrysocephala		
9.		Acecia cochlearis (Rigid Wattle)		
10.		Acacia crassiuscula		
11.	3282	Acacia cyclops (Coastal Wattle)		
12.		Acacia divergens		
13.		Acacia extensa (Wiry Wattle)		
14.		Acacia gilbertii		
15.		Acecia hastulata		
16.		Acacia Incurva		
17.		Acacia iteaphylia	Yaran yaran	
18.		Acacia leioderma		
19.		Acacia littorea		
20.		Acecia longifolia subsp. longifolia	Y	
21.		Acacia luteola	ESTERO AND PROGRAMMENT OF STREET	
22.		Acacia mooreana		
23.		Acacia myrtifolia		
24.		Acacia pentadenia (Karri Wattle)		
25.				
26.		Acacia pentadenia subsp. pentadenia	halfe file a case of sail eff	
27.		Acacia pentadenia subsp. syntoma		
28.		Acacia preissiana		
		Acacia pulchella (Prickly Moses)		
29.		Acacia pulchella var. goadbyi		
30.		Acacia pulchella var. pulchella		
31.		Acacia saligna subsp. stolonifera		
32.		Acacia scalpelliformis		
33.		Acacia stenoptera (Narrow Winged Wattle)		
34.		Acacia sulcata var. sulcata		
35.		Acacia tetragonocarpa		
36.		Acacia urophylla		
37.		Acacia varia var. varia		
38.	3185	Acaena novae-zelandiae	Y	
39.	17774	Acetoselle vulgaris	Y	
40.	10824	Acidonia microcarpa		
41.	6295	Acrotriche cordata (Coast Ground Berry)		
42.	5315	Actinodium cunninghamii (Albany Daisy)		
43.	6203	Actinotus glomeratus		
44.	12958	Actinotus laxus		
45.	6206	Actinotus omnifertilis		
46.	7818	Actites megalocarpus (Dune Tristle)		
47.		Adenanthos cuneatus (Coastal Jugliower)		
48.		Adenanthos obovatus (Basket Flower)		
49.		Adiantum aethiopicum (Common Maidenhair)		
50.		Agonis flexuosa (Peppermint)		
51.		Agonis flexuosa var. flexuosa		
52.		Agonis flexuosa var. latifolia		
53.		Agonis theiformis		

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
54.		Agrostis capillaris	Y		Area
55.		Agrostis stolonifera (Creeping Bent)	Y		
56.		Agrostocrinum hirsutum	920		
57.		Agrostocrinum scabrum subsp. scabrum			
58.	185	Aira cupaniana (Silvery Hairgrass)	Y		
59.	187	Aira praecox (Early Hairgrass)	Y		
60.	12160	Alexgeorgea ganopoda		P3	
61.	1724	Allocasuarina decussata (Karri She-oak)			
62.	1728	Allocasuarina fraseriana (Sheoak)			
63.		Allocasuarina humilis (Dwarf Sheoak)			
64.		Allocasuarina thuyoides (Horned Sheoak)			
65.		Allocasuarina trichodon	9287		
66.		Amaranthus caudatus (Love Lies Bleeding)	Y		
67.		Ammophila arenaria subsp. arenaria	Υ		
68. 69.		Amperea ericoides Amperea protensa		P3	
70.		Amperea simulans		PS	
71.		Amperea volubilis			
72.		Amphibromus nervosus			
73.		Amphipogon amphipogonoides			
74.		Amphipogon avenaceus			
75.	197	Amphipogon debilis			
76.	20184	Amphipogon laguroides subsp. laguroides			
77.	20196	Amphipogon setaceus			
78.	1058	Anarthria gracilis			
79.		Anarthria humilis			
80.		Anarthria laevis			
81.		Anarthria prolifera			
82.		Anarthria scabra		-	
83. 84.		Andersonia amabile Andersonia auriculata		P3 P3	
85.		Andersonia auriculata Andersonia caerulea (Foxtails)		P3	
86.		Andersonia caerulea subsp. caerulea			
87.		Andersonia caerulea subsp. diminuta			Y
88.		Andersonia depressa		P4	
89.	18100	Andersonia geniculata			
90.	17644	Andersonia hammersleyana		P2	
91.	6317	Andersonia micrantha			
92.	18103	Andersonia redolens		P1	
93.		Andersonia setifolia		P3	
94.		Andersonia simplex (Spiked Andersonia)			
95.		Andersonia sp. Frankland (W. Jackson BJ8)			
96.		Andersonia sp. Mitchell River (B.G. Hammersley 925)		P3	
97.		Andersonia sprengelioides		D2	
98. 99.		Andersonia virolens Angianthus pletycephalus		P2	
100.		Angianthus preissianus			
101.		Anigozanthos bicolor (Little Kangaroo Paw)			
102.		Anigozanthos bicolor subsp. decrescens			
103.	1407	Anigozanthos flavidus (Tall Kangaroo Paw)			
104.	1413	Anigozanthos preissii (Albany Catspaw)			
105.	29	Anogramma leptophylia (Annual Fern)			
106.	17455	Anredera cordifolia	Υ		
107.	6949	Anthocercis littorea (Yellow Tailflower)			
108.		Anthocercis sylvicola		P2	
109.		Anthocercis viscosa subsp. viscosa			
110.		Anthotium humile (Dwarf Anthotium)			
111.		Anthotium sp. Peaceful Bay (J.R. Wheeler 3772 & S.J. Patrick)			
112.		Anthoxanthum odoratum (Sweet Vernal Grass)	Y	DO.	
113. 114.		Actus franklandii Actus intermedia		P2	
115.		Aotus passerinoides			
116.		Actus tenuis			
117.		Aphelia cyperoides			
118.		Apium prostratum (Sea Celery)			
119.		Apium prostratum var. filiforme			
120.		Apium prostratum var. prostratum (Sea Celery)			
121.	17845	Apodasmia ceramophila		P2	
122.	7839	Arctotheca populifolia (Dune Arctotheca)	Y		
123.	11542	Arrhenatherum elatius var. bulbosum (Onion Twitch)	Y		

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
124.	8779	Asparagus asparagoides (Bridal Creeper)	Y		3.7.3.5
125.		Asparagus scandens	Y		
126.	61	Asplenium aethiopicum (Forked Spleenwort)		P4	
127.	62	Asplenium flabellifolium (Necklace Fern)			
128.	20361	Astartea arbuscula		P4	
129.	20347	Astartea astarteoides			
130.		Astartea comiculata			
131.		Astartea glomerulosa			
132.		Astartea laricifolia			
133. 134.		Astartea leptophylla			
135.		Astartea scoparia Astartea sp. big bracteoles (A.R. Annels 995)			
136.		Astartea sp. southern ranges (T.E.H. Aplin 2108)			
137.		Asteridea nivea			
138.		Asteridea pulverulenta (Common Bristle Daisy)			
139.		Asterolasia squamuligera			
140.		Astroloma baxteri			
141.	6324	Astroloma compactum			
142.	6325	Astroloma drummondii			
143.	6334	Astroloma pallidum (Kick Bush)			
144.	2462	Atriplex hypoleuca			
145.	2463	Atriplex isatidea (Coast Saltbush)			
146.		Atriplex prostrata (Hastate Orache)	Y		
147.		Austrodanthonia acerosa			
148.		Austrodanthonia caespitosa			
149.		Austrodanthonia occidentalis			
150.		Austrodanthonia pilosa			
151. 152.		Austrodanthonia racemosa Austrodanthonia setacea			
153.		Austrostipa compressa			
154.		Austrostipa flavescens			
155.		Austrostipa hemipogon			
156.		Austrostipa juncifolia			
157.		Austrostipa mollis			
158.	17250	Austrostipa pycnostachya			
159.	17253	Austrostipa semibarbata	E SHALL SHOULD BE		
160.	231	Avellinia michelii	Y		
161.		Avena barbata (Bearded Oat)	Y		
162.		Axonopus fissifolius	Y		
163.		Baeckea blackettii			
164.		Baeckea pygmaea			
165.		Banksie arctotidis			
166. 167.		Banksia armata var. armata			
167.		Banksia armata var. ignicida Ranksia attanuata (Slandar Banksia)			
169.		Banksia attenuata (Slender Banksia) Banksia dallanneyi subsp. sylvestris			
170.		Banksia dallanneyi var. mellicula			
171.		Banksia formosa (Showy Dryandra)			
172.		Banksia gardneri var. brevidentata			
173.		Banksia gardneri var. gardneri			
174.	1819	Banksia grandis (Bull Banksia)			
175.	1822	Banksia ilicifolia (Holly-leaved Banksia)			
176.	1830	Banksia littoralis (Swamp Banksia)			
177.		Banksia nivea (Honeypot Dryandra)			
178.		Banksia occidentalis (Red Swamp Banksia)			
179.		Banksia porrecta		P4	
180.		Banksia quercifolia (Oak-leaved Banksia)			
181.		Banksia seminuda (River Banksia)			
182.		Banksia serra (Serrate-leaved Dryandra)		P4	
183.		Banksia sessilis (Parrot Bush)		D.	
184. 185.	1851	Banksia sessilis var. cordata Banksia sphaerocarpa (Round-fruit Banksia)		P4	
186.		Banksia sphaerocarpa (Round-Iruit Banksia) Banksia sphaerocarpa var. sphaerocarpa (Fox Banksia)			
187.		Banksia squarrosa subsp. squarrosa			
188.		Banksia verticillata (Albany Banksia)		т	
189.		Barbula calycina			
190.		Bartsia trixago	Y		
191.		Baumea acuta (Pale Twig-rush)			
192.	741	Baumea articulata (Jointed Rush)			
193.	743	Baumea juncea (Bare Twigrush)			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
194.		Baumea preissii subsp. laxa			
195.		Baumea preissii subsp. preissii			
196.		Baumea riparia			
197.		Baumea rubiginosa Paumea vaginalia (Sheath Tuiggush)			
198. 199.		Baumea vaginalis (Sheath Twigrush) Baxteria australis			
200.		Beaufortia decussata (Gravel Bottlebrush)			
201.		Beaufortia micrantha var. micrantha			
202.		Beaufortia sparsa (Swamp Bottlebrush)			
203.		Billardiera coriacea			
204.		Billardiera drummondii			
205.	3157	Billardiera floribunda (White-flowered Billardiera)			
206.	25798	Billardiera fusiformis (Australian Bluebell)			
207.	3159	Billardiera laxiflora			
208.	3165	Billardiera variifolia			
209.	4403	Boronia alata (Winged Boronia)			
210.		Boronia crenulata (Aniseed Boronia)			
211.		Boronia crenulata subsp. crenulata		*	
212.		Boronia crenulata var. crenulata			
213.		Boronia cymosa (Granite Boronia)			
214. 215.		Boronia denticulata Boronia gracilipes (Karri Boronia)	5		
216.		Boronia heterophylla (Kalgan Boronia)			
217.		Boronia juncea subsp. laniflora			
218.		Boronia juncea subsp. micrantha			
219.		Boronia megastigma (Scented Boronia)			
220.		Boronia molloyae (Tall Boronia)			
221.	4430	Boronia nematophylla			
222.	4441	Boronia spathulata (Boronia)			
223.	4442	Boronia stricta			
224.	4443	Boronia subsessilis			
225.	4447	Boronia virgata		P4	
226.		Borya longiscapa		P2	Y
227.		Borya sphaerocephala (Pincushions)			
228.		Bossiaea aquifolium subsp. aquifolium			
229.		Bossiaea aquifolium subsp. laidlawiana			
230. 231.		Bossiaea dentata Bossiaea disticha		P3	
232.		Bossiaea linophylla		PS	
233.		Bossiaea ornata (Broad Leaved Brown Pea)			
234.		Bossiaea praetermissa			
235.		Bossiaea rufa			
236.	3723	Bossiaea webbii (Water Bush)			
237.	6341	Brachyloma preissii (Globe Heath)			
238.	30136	Brachyloma preissii subsp. preissii			
239.	7871	Brachyscome ciliaris			
240.		Breutelia affinis			
241.		Briza maxima (Blowfly Grass)	Y		
242.		Briza minor (Shivery Grass)	Y		
243.		Bromus catharticus (Prairie Grass)	Y		
244.		Bromus hordeaceus (Soft Brome)	Y		
245. 246.		Bryum argenteum Burchardia congesta			
247.		Burchardia monantha			
248.		Burchardia multiflora (Dwarf Burchardia)			
249.		Caesia micrantha (Pale Grass-lily)	14		
250.		Caesia occidentalis			
251.		Cakile maritima (Sea Rocket)	Y		
252.	13852	Caladenia abbreviata		P3	
253.	15328	Caladenia applanata subsp. applanata			
254.	15329	Caladenia applanata subsp. erubescens			
255.	18035	Caladenia bicalliata subsp. bicalliata			
256.	18036	Caladenia bicalliata subsp. cleistogama			
257.	15335	Caladenia brownii			
258.		Caladenia caimsiana (Zebra Orchid)			
259.		Caladenia corynephora			
260.		Caladenia ensata			
261.		Caladenia evanescens		P1	
262.		Caladenia flava (Cowslip Orchid)			
263.	15348	Caladenia flava subsp. flava			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query
264.	15350	Caladenia flava subsp. sylvestris			rivu
265.		Caladenia gardneri			
266.	1596	Caladenia huegelii (Grand Spider Orchid)		т	
267.	1599	Caladenia latifolia (Pink Fairy Orchid)			
268.	15365	Caladenia longicauda subsp. longicauda			
269.	15367	Caladenia longicauda subsp. redacta			
270.	1603	Caladenia longiclavata (Clubbed Spider Orchid)			
271.	1604	Caladenia macrostylis (Leaping Spider Orchid)			
272.	10883	Caladenia magniclavata (Big Clubbed Spider Orchid)			
273.	1605	Caladenia marginata (White Fairy Orchid)			
274.	18024	Caladenia meridionalis			
275.	1608	Caladenia nana (Pink Fan Orchid)			
276.	15372	Caladenia nana subsp. unita			
277.	1609	Caladenia pectinata (King Spider Orchid)			
278.	18033	Caladenia pholcoidea subsp. pholcoidea			
279.	1613	Caladenia reptans (Little Pink Fairy Orchid)			
280.	15377	Caladenia reptans subsp. reptans			
281.	18400	Caladenia ultima			
282.	2845	Calandrinia brevipedata (Short-stalked Purslane)			- 5)
283.	2846	Calandrinia calyptrata (Pink Purslane)			
284.	2848	Calandrinia corrigioloides (Strap Purslane)			
285.	2856	Calandrinia liniflora (Parakeelya)			
286.	19306	Calectasia grandiflora subsp. southern (H. Demarz 546)			83
287.	10861	Callistachys lanceolata (Wonnich)			
288.	5394	Callistemon glaucus			
289.	4717	Callitriche stagnalis (Common Starwort)	Y		
290.	33160	Calochilus uliginosus			
291.	5415	Calothamnus lateralis			
292.	35797	Calothamnus lateralis var. lateralis			
293.	5425	Calothamnus preissii			
294.	35803	Calothamnus scabridus		P2	
295.	5430	Calothamnus schaueri			
296.	16493	Calycopeplus oligandrus			
297.	5440	Calytrix asperula (Brush Starflower)			
298.		Calytrix leschenaultii			
299.		Calytrix sp. Esperance (M.A. Burgman 4268A)			
300.		Calytrix tenuiramea			
301.		Calytrix tetragona (Common Fringe-myrtle)			
302,		Campylopus bicolor			
303.		Campylopus bicolor var. bicolor			
304.		Campylopus introflexus	Y		
305.		Carduus pycnocephalus (Slender Thistle)	Y		
306.		Carex appressa (Tall Sedge)			
307.		Carex preissii			
308.		Cassytha glabella (Tangled Dodder Laurel)			
309.		Cassytha glabella forma casuarinae			
310.		Cassytha glabella forma glabella			
311.		Cassytha pomiformis (Dodder Laurel)			
312.		Cassytha racemosa (Dodder Laurel)			
313.		Cassytha racemosa forma pilosa			
314.		Cassytha racemosa forma racemosa			
315.		Caustis pentandra (Thick Twist Rush)	THE RELIGION OF SHEET		
316.		Centaurium erythraea (Common Centaury) Centaurium spicatum (Spika Centaury)	Y		
317. 318.		Centaurium spicatum (Spike Centaury) Centaurium tenuiflorum			
			Y		
319.		Centella asiatica			
320.		Centipeda cunninghamii (Common Sneezewood)			
321.		Centralitius ruber subsp. ruber Centralisis eristate (Painted Centralisis)	Y		
322. 323.		Centrolepis aristata (Pointed Centrolepis)			
		Centrolepis drummondiana			
324. 325.		Centrolenis polyguna (Winy Centrolenis)			
326.		Centrolepis polygyna (Wiry Centrolepis) Centrolepis (Albany Pitcher Plant)			
		Cephalotus follicularis (Albany Pitcher Plant)			
327.		Cerastium palearicum Cerastium planeratum (Moura Far Chickwood)	Y		
328. 329.		Ceratodon purpusas	Y		
329.		Ceratodon purpureus Ceratodon purpureus subsp. convolutus			SELECT YESTER
331.		Chaetanthus aristatus			
332.		Chaetanthus leptocarpoides			
333.		Chaetanthus tenellus			
555.	11001				

	Name ID	Species Name		Naturalised	Conservation Code	¹ Endemic To Query Area
334.		Chamaescilla corymbosa var. corymbosa				
335.	11878	Chamaescilla corymbosa var. paradoxa				
336.		Chamaexeros longicaulis			P2	
337.		Chamelaucium sp. Mt Frankland (A.S. George 11117)			P2	
338.		Chamelaucium sp. Nornalup (N.G. Marchant 76/125)			P2	
339. 340.		Cheilanthes austrotenuifolia Cheiranthera parviflora				
341.		Chenopodium album (Fat Hen)		Y		
342.		Chenopodium glaucum (Glaucous Goosefoot)		Ÿ		
343.		Chenopodium murale (Nettle-leaf Goosefoot)		Ý		
344.	17686	Chordifex gracilior			P3	
345.	17675	Chordifex jacksonii			P3	
346.	17689	Chordifex laxus				
347.	2335	Choretrum lateriflorum (Dwarf Sour Bush)				
348.	4448	Chorilaena quercifolia (Chorilaena)				
349.		Chorizandra cymbaria (Heron Bristle Rush)		6		9(5)
350.		Chorizandra enodis (Black Bristlerush)				
351.		Chorizema aciculare (Needle-leaved Chorizema)				
352. 353.		Chorizema aciculare subsp. aciculare Chorizema cordatum				
354.		Chorizema diversifolium				
355.		Chorizema glycinifolium				
356.		Chorizema ilicifolium (Holly Flame Pea)				
357.		Chorizema reticulatum (Showy Flame Pea)				
358.	13107	Chorizema retrorsum				
359.	3761	Chorizema rhombeum				
360.	14586	Chorizema spathulatum				
361.	6543	Cicendia filiformis (Slender Cicendia)		Υ		
362.		Cirsium vulgare (Spear Thistle)		Υ		
363.		Clematis pubescens (Common Clematis)				
364.		Comesperma calymega (Blue-spike Milkwort)				
365. 366.		Comesperma ciliatum Comesperma confertum				
367.		Comesperma flavum				
368.		Comesperma nudiusculum				
369.		Comesperma virgatum (Milkwort)				
370.	1862	Conospermum caeruleum (Blue Brother)				
371.	15610	Conospermum caeruleum subsp. caeruleum				
372.	1863	Conospermum capitatum				
373.		Conospermum capitatum subsp. capitatum				
374.		Conospermum capitatum subsp. velutinum				
375.		Conospermum flexuosum (Tangled Smokebush)				
376.		Conospermum flexuosum subsp. flexuosum Conospermum teretifolium (Spider Smokebush)				
377. 378.		Conostylis aculeata (Prickly Conostylis)				
379.		Conostylis aculeata subsp. aculeata				
380.		Conostylis pusilla				
381.	1453	Conostylis serrulata				
382.	1454	Conostylis setigera (Bristly Cottonhead)				
383.	11597	Conostylis setigera subsp. setigera				
384.	5501	Conothamnus neglectus				
385.		Conyza sumatrensis		Υ		
386.		Coreopsis grandiflora (American Tickseed)		Υ		
387.		Corrigiola litoralis (Strapwort)		Υ	2.0	
388. 389.		Corybas limpidus Corybas recurvus	*		P4	
390.		Corymbia calophylla (Marri)				
391.		Corymbia ficifolia				
392.		Corynotheca micrantha var. panda				
393.		Cosmelia rubra (Spindle Heath)				
394.		Cotoneaster glaucophyllus		Y		*
395.		Cotula australis (Common Cotula)				
396.	7945	Cotula coronopifolia (Waterbuttons)		Y		
397.		Cotula cotuloides (Smooth Cotula)				
398.		Cotula turbinata (Funnel Weed)		Y		
399.		Craspedia variabilis				
400. 401.		Crassula closiana Crassula colorata (Dense Stonecrop)				
401.		Crassula colorata (Dense Stonecrop) Crassula colorata var. acuminata				
403		Crassula colorata var. colorata				

11563 Crassula colorata var. colorata

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
404.	20271	Crassula extrorsa			
405.	15706	Crassula natans var. minus	Y		
406.		Crassula peduncularis (Purple Stonecrop)			
407.		Crocosmia x crocosmiiflora	Υ		
408.		Crowea angustifolia (Crowea)			
409. 410.		Crowea angustifolia var. angustifolia			
411.		Crowea angustifolia var. platyphylla Cryptandra arbutiflora var. tubulosa			
412.		Cryptandra congesta		T	Y
413.		Cryptostylis ovata (Slipper Orchid)		A STREET, STRE	
414.		Cuscuta campestris (Golden dodder)	Y		
415.	15114	Cyanicula gemmata			
416.	15404	Cyanicula sericea			
417.	768	Cyathochaeta avenacea			
418	769	Cyathochaeta clandestina			
419.		Cyathochaeta equitans			
420.		Cyathochaeta stipoides		P3	
421.		Cyathochaeta teretifolia		P3	
422.		Cynodon dactylon (Couch)	Y		
423. 424.		Cynosurus echinatus (Rough Dogstail) Cyperus congestus (Dense Flat-sedge)	Y		
425.		Cyperus tenellus (Tiny Flatsedge)	Y		
426.		Cyrtostylis huegelii			
427.		Cyrtostylis robusta			
428.		Cyrtostylis tenuissima			
429.	287	Dactylis glomerata (Cocksfoot)	Y		
430.	7420	Dampiera alata (Winged-stem Dampiera)			
431.	7435	Dampiera diversifolia			
432.	7439	Dampiera fasciculata (Bundled-leaf Dampiera)			
433.		Dampiera hederacea (Karri Dampiera)			
434.		Dampiera leptoclada (Slender-shooted Dampiera)			
435.		Dampiera linearis (Common Dampiera)			
436. 437.		Dampiera pedunculata			
438.		Dampiera trigona (Angled-stem Dampiera) Darwinia citriodora (Lemon-scented Darwinia)			
439.		Darwinia oederoides			
440.		Darwinia thymoides			
441.	18193	Darwinia thymoides subsp. thymoides			
442.	5533	Darwinia vestita (Pom-pom Darwinia)			
443.	26752	Dasyclonium incisum			
444.		Dasypogon bromeliifolius (Pineapple Bush)			
445.		Daucus carota (Wild Carrot)	Y COLUMN		
446.		Daucus glochidiatus (Australian Carrot)			
447. 448.		Daviesia alternifolia Daviesia cordata (Bookleaf)			
449.		Daviesia decurrens (Prickly Bitter-pea)			
450.		Daviesia decurers (Frickly Biller-pea)			
451.		Daviesia gracilis			
452.		Daviesia horrida (Prickly Bitter-pea)			
453.		Daviesia inflata			
454.	3820	Daviesia mesophylla		P2	1.0
455.	3827	Daviesia oppositifolia (Rattle-pea)			
456.	3835	Daviesia preissii			
457.		Daviesia spinosissima			
458.		Desmocladus fasciculatus			
459.		Desmocladus flexuosus			
460.		Deyeuxia quadriseta (Reed Bentgrass)			
461. 462.		Dianella brevicaulis Dianella revoluta var. revoluta			
463.		Diaspasis filifolia (Thread-leaved Diaspasis)			
464.		Dichelachne crinita (Longhair Plumegrass)			
465.		Dichondra repens (Kidney Weed)			
466.		Dicranoloma billardierei			
467.		Dicranoloma diaphanoneuron			
468.	32345	Didymodon australasiae			
469.		Didymodon torquatus			
470.		Digitaria sanguinalis (Crab Grass)	Y		
471.		Diplotaxis muralis (Wall Rocket)	Y		
472. 473.		Dipogon lignosus (Dolichos Pea) Disa bracteata	Y		
470.	15045	Dies diestedia	Y		

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
474.	7054	Dischisma arenarium	Y		
475.	7961	Dittrichia graveolens (Stinkwort)	Y		
476.	7962	Dittrichia viscosa	Y		
477.		Diuris amplissima			
478.		Diuris corymbosa		1.500	
479.		Diuris drummondii (Tall Donkey Orchid)		т	
480. 481.		Diuris emarginata (Tall Donkey Orchid) Diuris laevis (Nannygoat Orchid)			
482.		Diuris laxiflora (Bee Orchid)			
483.		Diuris longifolia (Common Donkey Orchid)			
484.		Diuris setacea (Bristly Donkey Orchid)			
485.	4757	Dodonaea ceratocarpa			
486.	11247	Dodonaea viscosa subsp. angustissima			
487.	1639	Drakaea elastica (Glossy-leaved Hammer Orchid)		T	
488.	1640	Drakaea glyptodon (King-in-his-carriage)			
489.		Drakaea gracilis			
490.		Drakeea livida		722	
491.		Drakaea micrantha		Т	
492. 493.		Drakaea thynniphila Drepanocladus aduncus		P2	
494.		Drosera barbigera		P2	
495.		Drosera binata		P2	
496.		Drosera bulbosa (Red-leaved Sundew)			
497.	13219	Drosera bulbosa subsp. bulbosa			
498.	13200	Drosera enodes			
499.		Drosera erythrogyne			
500.		Drosera erythrorhiza (Red Ink Sundew)			
501.		Drosera erythrorhiza subsp. erythrorhiza		-	
502.		Drosera fimbriata (Manypeaks Sundew)		P4	
503. 504.		Drosera gigantea subsp. gigantea Drosera glanduligera (Pimpernel Sundew)			
505.		Drosera hamiltonii (Rosy Sundew)			
506.		Drosera huegelii (Bold Sundew)			
507.		Drosera lasiantha			
508.	14298	Drosera macrantha subsp. macrantha			
509.	3109	Drosera menziesii (Pink Reinbow)			
510.		Drosera menziesii subsp. menziesii			
511.		Drosera menziesii subsp. penicillaris			
512.		Drosera microphylla (Golden Rainbow)			
513. 514.		Drosera modesta (Modest Rainbow) Drosera myriantha (Star Rainbow)			
515.		Drosera neesii subsp. neesii			
516.		Drosera pallida (Pale Rainbow)			
517.		Drosera platypoda (Fan-leaved Sundew)			
518.	3123	Drosera platystigma (Black-eyed Sundew)			
519.	3124	Drosera pulchella (Pretty Sundew)			
520.	29191	Drosera purpurascens			
521.	194940100	Drosera roseana			
522.		Drosera rosulata			
523. 524.		Drosera scorpioides (Shaggy Sundew) Drosera stolonifera (Leafy Sundew)			
525.		Drosera subhirtella (Sunny Rainbow)			
526.		Drosera sulphurea (Sulphur-flowered Sundew)	27		
527.		Dysphania glomulifera subsp. glomulifera			
528.	33480	Dysphania pumilio (Clammy Goosefoot)			
529.	32351	Eccremidium pulchellum			
530.		Echinochloa crus-galli (Barnyard Grass)	Y		
531.		Echium plantagineum (Paterson's Curse)	Y		
532. 533.		Ehrharta calycina (Perennial Veldt Grass)	Y	55	
533. 534.		Ehrharta longiflora (Annual Veldt Grass) Elymus scaber	Y		
535.		Elythranthera brunonis (Purple Enamel Orchid)			
536.		Elythranthera emarginata (Pink Enamel Orchid)			
537.		Empodisma gracillimum			
538.		Entosthodon apophysatus			
539.	32354	Entosthodon productus			
540.		Entosthodon subnudus			
541.		Entosthodon subnudus var. gracilis			
542. 543.		Epiblema grandiflorum (Babe-in-a-cradle) Epiblema grandiflorum var. grandiflorum			
J4J.	1/495	Europeina Grandinordin var. Grandinordin			

17495 Epiblema grandiflorum var. grandiflorum

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
544.	11570	Epilobium billardiereanum subsp. billardiereanum (Smooth Willow Herb)			155 T.T.
545.		Epilobium billardiereanum subsp. intermedium			
546.	6133	Epilobium hirtigerum (Hairy Willow Herb)			
547.	373	Eragrostis brownii (Brown's Lovegrass)			
548.	376	Eragrostis curvula (African Lovegrass)	Y		
549.	3149	Eremosyne pectinata			
550.		Erigeron karvinskianus	Y		
551.	15410	Eriochilus dilatatus subsp. dilatatus			
552.	15412	Eriochilus dilatatus subsp. multiflorus			
553.		Eriochilus helonomos			
554.		Eriochilus pulchellus			
555.		Eriochilus scaber (Pink Bunny Orchid)			
556.		Eriochilus scaber subsp. scaber			
557.		Eriochilus valens			
558.		Eryngium pinnatifidum (Blue Devils)			
559. 560.		Eucalyptus albida (White-leaved Mallee)			
561.		Eucalyptus brevistylis (Rates Tingle)		P4	
562.		Eucalyptus calcicola subsp. unita		P4	
563.		Eucalyptus comuta (Yate) Eucalyptus decipiens			
564.		Eucalyptus decipiens subsp. chalara			
565.		Eucalyptus decipiens subsp. chalara Eucalyptus decipiens subsp. decipiens			
566.		Eucalyptus decipiens subsp. decipiens Eucalyptus diversicolor (Karri)			
567.		Eucalyptus doratoxylon (Spearwood Mallee)			
568.		Eucalyptus falcata (Silver Mallet)			
569.		Eucalyptus guilfoylei (Yellow Tingle)			
570.		Eucalyptus jacksonii (Red Tingle)			
571.		Eucalyptus marginata (Jarrah)			
572.	13547	Eucalyptus marginata subsp. marginata (Jarrah)			
573.	5709	Eucalyptus megacarpa (Bullich)			
574.	5723	Eucalyptus occidentalis (Flat-topped Yate)			
575.	5739	Eucalyptus patens (Swan River Blackbutt)			
576.	5763	Eucalyptus rudis (Flooded Gum)			
577.	29732	Eucalyptus sp. Point Hillier (D. Nicolle & M. French DN 3759)			
578.	5776	Eucalyptus staeri (Albany Blackbutt)			
579.	19652	Eucalyptus vegrandis subsp. recondita			
580.		Eucalyptus virginea		P4	
581.		Eucalyptus wandoo subsp. wandoo			
582.		Euchilopsis linearis (Swamp Pea)			
583.		Euchiton collinus			
584.		Euchiton sphaericus			
585.		Euphorbia paralias (Sea Spurge)	Y		
586. 587.		Euphorbia peplus (Petty Spurge)	Y		
588.		Euphrasia collina (Purple Eye-bright) Euphrasia collina subsp. tetragona			
589.		Eutaxia epacridoides			
590.		Eutaxia myrtifolia			
591.		Eutaxia parvifolia			
592.		Eutaxia virgata			
593.		Evandra aristata			
594.		Evendra pauciflora			
595.		Exocarpos odoratus (Scented Ballart)			
596.		Exocarpos sparteus (Broom Ballart)			
597.	430	Festuca arundinacea (Tall Fescue)	Υ		gas one a first
598.	20216	Ficinia nodosa (Knotted Club Rush)			
599.	32363	Fissidens curvatus			
600.		Fissidens leptocladus			
601.		Fissidens linearis var. linearis			
602.		Fissidens taylorii var. taylorii			
603.		Fissidens tenellus			
604.		Fissidens tenellus var. tenellus			Y
605.		Foeniculum vulgare (Fennel)	Y		
606.		Franklandia fucifolia (Lanoline Bush)			
607.		Fuchsia magellanica	Y		Y
608.		Fumaria capreolata (Whiteflower Fumitory)	Y		
609.		Funaria muralis subsp. muralis	Y		
610. 611.		Funaria hygrometrica			
612.		Gahnia decomposita Gahnia sclerioides		PA	
613.		Gannia scieriolaes Gahnia trifida (Coast Saw-sedge)		P3	
010.	301				

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
614.	7323	Galium murale (Small Goosegrass)	Y		Aicu
615.	12932	Gastrodia lacista			
616.		Gastrolobium bilobum (Heart Leaf Poison)			
617.					
618. 619.		Gastrolobium brownii Gastrolobium coriaceum			
620.		Gastrolobium conaceum Gastrolobium cuneatum			
621.		Gastrolobium elegans		P2	
622.		Gastrolobium ferrugineum		P2	
623.		사람들이 살아가면 하다면 하다면 하다면 하다면 하다니다.		18/25/	
624.	20511	Gastrolobium minus			
625.	3911	Gastrolobium ovalifolium (Runner Poison)		P4	
626.	19733	Gastrolobium retusum			
627.					
628.		Gastrolobium sp. East Peak (E.D. Middleton EDM 43)		P2	
629.		Gemmabryum austrosabulosum			
630. 631.		Gemmabryum cheelii Gemmabryum chrysoneuron			
632.		Gemmabryum dichotomum			
633.		Gemmabryum pachythecum			
634.		Geranium retrorsum			
635.	4341	Geranium solanderi (Native Geranium)			
636.	1524	Gladiolus undulatus (Wild Gladiolus)	Y		
637.		Glischrocaryon angustifolium			
638.		Glischrocaryon aureum (Common Popflower)			
639.		Glossostigma drummondii (Mudmat)			
640. 641.		Gnaphalium indutum (Tiny Cudweed) Gompholobium burtonioides			
642.		Gompholobium capitatum			
643.		Gompholobium confertum			
644.					
645.	3950	Gompholobium knightianum			
646.	3953	Gompholobium ovatum			
647.	3954	Gompholobium polymorphum			
648.		Gompholobium preissii			
649.		Gompholobium scabrum			
650. 651.					
652.		Gompholobium venustum (Handsome Wedge-pea) Gompholobium villosum			
653.		Gonocarpus benthamii			
654.		Gonocarpus benthamii subsp. benthamii			
655.	6150	Gonocarpus diffusus			
656.	6160	Gonocarpus paniculatus			
657.	6162	Gonocarpus pusillus		P3	
658.		Gonocarpus rudis		P2	
659.		Gonocarpus simplex		P3	
660. 661.		Gonocarpus trichostachyus Goodenia coerulea		P3	
662.		Goodenia eatoniana			
663.		Goodenia helmsii			
664.	7523	Goodenia leptoclada (Thin-stemmed Goodenia)			
665.	7538	Goodenia pulchella			
666.	19283	Goodenia pulchella subsp. Mt Barker (K.F. Kenneally 1166)			
667.		Goodenia pusilla			
668.		Goodenia scapigera (White Goodenia)			
669.		Goodenia sp. South Coast (A.R. Annels ARA1846)		P3	
670. 671.		Grammatotheca bergiana var. bergiana Gratiola pubescens	Y		
672.		Grevillea centristigma			
673.		Grevillea cirsiifolia (Varied-leaf Grevillea)			
674.		Grevillea depauperata			
675.		Grevillea diversifolia subsp. subtersericata			
676.	13084	Grevillea fuscolutea		т	Y
677.	2052	Grevillea occidentalis			
678.		Grevillea papillosa		P3	
679.		Grevillea pulchella (Beautiful Grevillea)			
680.		Grevillea pulchella subsp. ascendens			
681. 682.		Grevillea pulchella subsp. pulchella Grevillea quercifolia (Oak-leaf Grevillea)			
683.		Grevillea trifida			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
684.	908	Gymnoschoenus anceps			
685.	32390	Gymnostomum calcareum			
686.	2787	Gyrostemon sheathii			
687.	1465	Haemodorum discolor			
688.	1468	Haemodorum laxum			
689.	1472	Haemodorum simplex			
690.	1474	Haemodorum sparsiflorum			
691.	1475	Haemodorum spicatum (Mardja)			
692.	2128	Hakea amplexicaulis (Prickly Hakea)			
693.		Hakea ceratophylla (Horned Leaf Hakea)			
694.	2145	Hakea corymbosa (Cauliflower Hakea)			
695.	2150	Hakea cuculiata (Hood Leaved Hakea)			
696.	2156	Hakea elliptica (Oval-leaf Hakea)			
697.	2159	Hakea falcata			
698.	2162	Hakea florida			
699.	17818	Hakea ilicifolia			
700.	2169	Hakea lasiantha (Woolly Flowered Hakea)			
701.	2170	Hakea lasianthoides			
702.	2174	Hakea linearis			
703.	2191	Hakea oleifolia (Dungyn)			
704.	2197	Hakea prostrata (Harsh Hakea)			
705.	2203	Hakea ruscifolia (Candle Hakea)			
706.	2212	Hakea sulcata (Furrowed Hakea)			
707.	2214	Hakea trifurcata (Two-leaf Hakea)			
708.		Hakea undulata (Wavy-leaved Hakea)			
709.	2216	Hakea varia (Variable-leaved Hakea)			
710.	6183	Haloragodendron racemosum (Shrubby Raspwort)			
711.	3961	Hardenbergia comptoniana (Native Wisteria)			
712.	32391	Hedwigia ciliata			
713.	32392	Hedwigidium integrifolium			
714.	29594	Helichrysum luteoalbum (Jersey Cudweed)		£5.	
715.	3016	Heliophila pusilla	real and the Y		
716.	439	Hemarthria uncinata (Matgrass)			
717.	11451	Hemarthria uncinata var. uncinata			
718.	6839	Hemiandra pungens (Snakebush)			
719.	6855	Hemigenia humilis			
720.	6856	Hemigenia incana (Silky Hemigenia)			
721.		Hemigenia microphylla		P3	
722.	6865	Hemigenia podalyrina			
723.	6866	Hemigenia pritzelii			
724.	6868	Hemigenia rigida		P1	
725.	5108	Hibbertia acerosa (Needle Leaved Guinea Flower)			
726.	5109	Hibbertia amplexicaulis			
727.	5114	Hibbertia commutata			
728.	5117	Hibbertia cuneiformis (Cutleaf Hibbertia)			
729.		Hibbertia cunninghamii			
730.	5119	Hibbertia depressa			
731.	5126	Hibbertia furfuracea			
732.	5129	Hibbertia glomerata			
733.		Hibbertia glomerata subsp. glomerata			
734.	5131	Hibbertia gracilipes			
735.	5132	Hibbertia grossulariifolia			
736.	5137	Hibbertia inconspicua			
737.		Hibbertia lineata			
738.	5144	Hibbertia microphylla			
739.		Hibbertia notibractea			4
740.		Hibbertia nymphaea			
741.	5154	Hibbertia perfoliata			
742.		Hibbertia pilosa (Hairy Guinea Flower)			
743.		Hibbertia pulchra var. acutibractea			
744.		Hibbertia pulchra var. pulchra			
745.		Hibbertia racemosa (Stalked Guinea Flower)			
746.		Hibbertia serrata (Serrate Leaved Guinea Flower)			
747.		Hibbertia silvestris			
748.		Hibbertia stellaris (Orange Stars)			
749.		Hibbertia trichocalyx			
750.		Histiopteris incisa			
751.		Holcus lanatus (Yorkshire Fog)	v s		
752.		Homalosciadium homalocarpum			
753.		Homalospermum firmum			
	30.0				

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
754.	449	Hordeum leporinum (Barley Grass)	Y		
755.	3964	Hovea chorizemifolia (Holly-leaved Hovea)			
756.		Hovea elliptica (Tree Hovea)		0	
757.		Hovea trisperma (Common Hovea)			
758.		Hyalosperma pusillum			
759. 760.		Hybanthus debilissimus Hybanthus floribundus subsp. floribundus			
761.		Hydrocotyle alata			
762.		Hydrocotyle callicarpa (Small Pennywort)			
763.		Hydrocotyle diantha			
764.	6231	Hydrocotyle hirta (Hairy Pennywort)			
765.	6237	Hydrocotyle plebeye			
766.		Hydrocotyle scutellifera			
767.		Hydrocotyle tetragonocarpa			
768.		Hypnum cupressiforme			
769. 770.		Hypocalymma angustifolium (White Myrtle) Hypocalymma angustifolium subsp. Swan Coastal Plain (G.J. Keighery 16777)			
771.		Hypocalymma cordifolium subsp. cordifolium			
772.		Hypocalymma cordifolium subsp. minus		P4	
773.		Hypocalymma ericifolium			
774.	13106	Hypocalymma scariosum			
775.	25795	Hypocalymma sp. Walpole (E.D. Middleton EDM 33)			
776.	5827	Hypocalymma strictum			
777.		Hypochaeris glabra (Smooth Catsear)	Y		
778.		Hypolaena exsulca			
779.		Hypolaena fastigiata			
780.	19918				
781. 782.		Hypolaena pubescens Hypoxis occidentalis var. quadriloba			
783.	6630		Υ		
784.		Ischyrodon lepturus			
785.	11	Isoeles drummondii (Quillwort)			
786.	20199	Isolepis cemua var. cemua			
787.	20200	Isolepis cernua var. setiformis			
788.		Isolepis congrua			
789.		Isolepis cyperoides			
790.	916		220		
791. 792.		Isolepis marginata (Coarse Club-rush) Isolepis prolifera (Budding Club-rush)	Y Y		
793.		Isopogon attenuatus			
794.		Isopogon axillaris			
795.		Isopogon buxifolius var. buxifolius			
796.	2226	Isopogon cuneatus (Coneflower)			
797.	2230	Isopogon formosus (Rose Coneflower)			
798.	16880	Isopogon formosus subsp. formosus			
799.	2233				
800.	2237				
801. 802.		Isopogon teretifolius (Nodding Coneflower) Isopogon teretifolius subsp. teretifolius (Nodding Coneflower)			
803.	7396	- X-100-70-12-1-1-1-1-1-1-1-1-X-1-X-1-X-1-1-X-1			
804.		Isotropis cuneifolia (Granny Bonnets)			
805.	19700	Isotropis cuneifolia subsp. cuneifolia			
806.	1532	lxia maculata (Yellow lxia)	Y		
807.	1534	Ixia polystachya (Variable Ixia)	Y		
808.	8092	Ixiolaena viscosa (Sticky Ixiolaena)			
809.	3997				
810.	4017				
811. 812.	4028				
813.	1295 1297				
814.	1299				
815.	20454		Y		
816.	1177		Y		
817.	1178	Juncus bufonius (Toad Rush)	Y		
818.	1179	Juncus caespiticius (Grassy Rush)			
819.	1180	- 19 CONTROL OF THE C	Y		
820.		Juncus holoschoenus (Jointleaf Rush)			
821.		Juncus kraussii subsp. australiensis			
822.		Juncus mismosanhalus	Y	P2	
823.	1166	Juncus microcephalus	3		

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
824.	1187	Juncus oxycarpus	Y		
825.	1188	Juncus pallidus (Pale Rush)			
826.	1190	Juncus planifolius (Broadleaf Rush)			
827.	1195	Juncus subsecundus (Finger Rush)			
828.	1196	Juncus usitatus (Common Rush)	Y		
829.	4036	Kennedia carinata			
830.	4037	Kennedia coccinea (Coral Vine)			
831.	37960	Kennedia coccinea subsp. calcaria			
832.	4039	Kennedia glabrata (Northcliffe Kennedia)		т	
833.	1221	Kingia australis (Kingia)			
834.		Kunzea ericifolia subsp. ericifolia			
835.	5835	Kunzea micrantha			
836.		Kunzea recurva			
837.		Kunzea sulphurea			
838.		Lachnagrostis filiformis			
839.		Lagenophora huegelii			
840.		Lagurus ovatus (Hare's Tail Grass)	Υ		
841.		Lambertia inermis var. inermis			
842.		Lambertia rariflora subsp. lutea		P3	
843.		Lambertia uniflora			
844.		Lasiopetalum floribundum (Free Flowering Lasiopetalum)			
845. 846.		Lasiopetalum sp. Denmark (B.G. Hammersley 2012)		P3	
847.		Lathyrus latifolius (Perennial Pea)	TELEVISION YEARS		
848.	4047	Lathyrus tingitanus (Tangier Pea) Latrobea brunonis	1		
849.	. 3.0.00	Latrobea diosmifolia			
850.		Latrobea genistoides			
851.		Latrobea glabrescens			
852.	The supplemental state of the supplemental s	Latrobea tenella			
853.		Laxmannia grandiflora			
854.		Laxmannia grandiflora subsp. brendae		T	Y
855.		Laxmannia jamesii (James' Paperlily)		P4	
856.		Laxmannia minor			
857.	1308	Laxmannia sessiliflora (Nodding Lily)			
858.		Laxmannia squarrosa			
859.	7568	Lechenaultia biloba (Blue Leschenaultia)			
860.	7572	Lechenaultia expansa			
861.	7590	Lechenaultia tubiflora (Heath Leschenaultia)			
862.	1051	Lemna disperma (Duckweed)		i.	
863.	19820	Leontodon hispidus subsp. hispidus	Y		Υ
864.	3021	Lepidium bonariense (Peppercress)	Y		
865.		Lepidium didymum	Y		
866.		Lepidium pseudotasmanicum		P4	
867.		Lepidium rotundum (Veined Peppercress)			
868.		Lepidosperma drummondii			
869.		Lepidosperma effusum (Spreading Sword-sedge)			
870.		Lepidosperma gladiatum (Coast Sword-sedge)			
871.		Lepidosperma gracile (Slender Sword Sedge)			
872. 873.		Lepidosperma leptostachyum			
873. 874.		Lepidosperma longitudinale (Pithy Sword-sedge) Lepidosperma pubisquameum			
875.		Lepidosperma squamatum			
876.		Lepidosperma striatum			
877.		Lepidosperma tenue			
878.		Lepidosperma tetraquetrum			
879.		Lepidosperma viscidum (Sticky Sword Sedge)			
880.		Leporella fimbriata (Hare Orchid)			
881.		Leptobryum pyriforme			
882.		Leptocarpus laxus			
883.		Leptocarpus tenax (Slender Twine Rush)			
884.		Leptomeria cunninghamii			
885.	17703	Leptomeria ellytes			
886.		Leptomeria pauciflora (Sparse-flowered Currant Bush)			
887.	2353	Leptomeria scrobiculata			
888.	2355	Leptomeria squarrulosa			
889.	17852	Leptorhynchos scaber (Lanky Buttons)			
890.	5850	Leptospermum laevigatum (Coast Teatree)	Y		
891.	1084	Lepyrodia drummondiana			
892.		Lepyrodia extensa		P1	
893.	1086	Lepyrodia heleocharoides		P3	

1239 Lomandra preissii

963

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
964.	1240	Lomandra purpurea (Purple Mat Rush)			Alea
965.	1243	Lomandra sericea (Silky Mat Rush)			
966.	1244	Lomandra sonderi			
967.	1246	Lomandra suaveolens			
968.	4059	Lotus angustissimus (Narrowleaf Trefoil)	Y		
969.		Lotus subbiflorus	THE THE STATE OF T		
970.		Lotus uliginosus (Greater Lotus)	Y		
971.		Loxocarya cinerea			
972.		Luzula meridionalis (Field Woodrush)			
973.		Lycopodiella serpentina			
974.		Lyginia barbata			
975.		Lyginia imberbis			
976. 977.		Lyperanthus serratus (Rattle Beak Orchid)			
978.		Lysimachia arvensis (Pimpernel)			
979.		Lysinema ciliatum (Curry Flower) Lysinema conspicuum			
980.		Lysinema lasianthum		P4	
981.		Lysinema pentapetalum			
982.		Lythrum hyssopifolia (Lesser Loosestrife)	Y		
983.		Macrozamia riedlei (Zamia)	THE AVERAGE VALUE OF THE		
984.		Malva pseudolavatera	Y		
985.		Marianthus candidus (White Marianthus)	all and the same and the same		
986.		Marianthus drummondianus			
987.	17633	Marianthus erubescens			
988.	25822	Marianthus sylvaticus		P3	
989.	4072	Medicago arabica (Spotted Medic)	Υ		
990.	4076	Medicago lupulina (Black Medic)	Y		
991.	4079	Medicago polymorpha (Burr Medic)	Y		
992.	17679	Meeboldina coangustata			
993.	17676	Meeboldina crassipes		P3	
994.	17747	Meeboldina decipiens			
995.	1098	Meeboldina denmarkica			
996.	17677	Meeboldina roycei			
997.		Meeboldina scariosa			
998.		Meeboldina tephrina			
999.		Meeboldina thysanantha		P3	
1000.		Meionectes brownii (Swamp Raspwort)			
1001.	5878	Melaleuca blaeriifolia Melaleuca croxfordiae			
1002.	5900	Melaleuca cuticularis (Saltwater Paperbark)			
1004.		Melaleuca densa			
1005.	5921	Melaleuca incana (Grey Honeymyrtle)			
1006.		Melaleuca incana subsp. incana			
1007.		Melaleuca lanceolata (Rottnest Teatree)			
1008.		Melaleuca lateritia (Robin Redbreast Bush)			
1009.	5938	Melaleuca microphylla			
1010.	5946	Melaleuca pauciflora			
1011.	15993	Melaleuca pentagona var. pentagona			
1012.	5952	Melaleuca preissiana (Moonah)			
1013.	5959	Melaleuca rhaphiophylla (Swamp Paperbark)			
1014.	13277	Melaleuca ringens		P3	
1015.	5968	Melaleuca spathulata			
1016.	5980	Melaleuca thymoides			
1017.		Melaleuca viminea (Mohan)			
1018.		Melaleuca viminea subsp. demissa			
1019.		Melaleuca viminea subsp. viminea			
1020.		Melaleuca violacea			
1021.		Melanostachya ustulata			
1022.		Melilotus indicus Melilotus indicus Melilotus indicus Melilotus indicus			
1023. 1024.		Mentha pulenium (Pennyroyal)	Y		
1024.		Mentha pulegium (Pennyroyal) Mesomelaena graciliceps	Y		
1025.		Mesomelaena stygia subsp. stygia			
1027.		Mesomelaena tetragona (Semaphore Sedge)			
1028.		Meziella trifida		Т	
1029.		Microlaena stipoides (Weeping Grass)			
1030.		Microlaena stipoides var. stipoides			
1031.		Microtis alba (White Mignonette Orchid)			
1032.		Microtis alboviridis			
1033.	1658	Microtis atrata (Swamp Mignonette Orchid)			

1551 Patersonia pygmaea (Pygmy Patersonia)

	Name II	Species Name	Naturalised	Conservation Code	¹ Endemic To Query
110	155	Patersonia umbrosa (Yellow Flags)			Area
110		Patersonia umbrosa var. umbrosa			
110	06. 1719	Pelargonium australe subsp. australe			
110		Pelargonium australe subsp. drummondii			
110		Pelargonium capitatum (Rose Pelargonium)	Y		
110		Pelargonium littorale			
111	10. 530	Pennisetum clandestinum (Kikuyu Grass)	Y		
111	11. 624	Pentapeltis silvatica (Southern Pentapeltis)			
111	11109	Pericalymma crassipes			
111	13. 6000	Pericalymma ellipticum (Swamp Teatree)			
111	14. 1647	Pericalymma ellipticum var. ellipticum			
111	15. 16478	Pericalymma ellipticum var. floridum			
111	16. 1550	Pericalymma spongiocaule			
111	17. 11020	Persicaria hydropiper			
111	18. 226-	Persoonia graminea			
111	19. 226	Persoonia longifolia (Snottygobble)			
112	20. 227:	Persoonia saccata (Snottygobble)			
112	21. 228	Petrophile acicularis			
112		Petrophile diversifolia			
112		Petrophile media			
112	to to the	Petrophile rigida			
112		Petrophile serruriae			
112		Petrophile squamata subsp. squamata			
112		Petrorhagia dubia	Y		
112		Phalaris equatica (Phalaris)	Y		
112		Philonotis australiensis			
113		Philonotis tenuis			
113		Philotheca nodiflora subsp. lasiocalyx			
113		Philydrella drummondii			
113		Philydrella pygmaea (Butterfly Flowers)			
113		Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata			
113		Phleum pratense subsp. pratense	Υ		
113		Phyllangium paradoxum			
113		Phyllanthus calycinus (False Boronia)			
113		Phylloglossum drummondii (Pigmy Clubmoss)			
114		Phyllota barbata			
114		Phytolacca octandra (Red Ink Plant)	Y		
114		Pimelea angustifolia (Narrow-leaved Pimelea)			
114	13. 11928	Pimelea ciliata subsp. ciliata			
114	14. 5239	Pimelea clavata			
114	15. 5242	Pimelea erecta			
114	16. 5243	Pimelea ferruginea			
114	17. 5249	Pimelea hispida (Bristly Pimelea)			
114	18. 525°	Pimelea imbricata			
114	19. 11533	Pimelea imbricata var. imbricata			
115		Pimelea imbricata var. piligera			
115		Pimelea lanata			
115		Pimelea lehmanniana subsp. nervosa			
115		Pimelea longiflora			
115		Pirnelea longiflora subsp. longiflora			
115		Pimelea preissii			
115		Pimelea rosea (Rose Banjine)			
115		Pimelea rosea subsp. annelsii Pimelea rosea subsp. rosea		P3	
115		Pimelea spectabilis (Bunjong)			
116		Pimelea suaveolens subsp. suaveolens			
116		Pimelea sulvestris			
116		Pimelea tinctoria			
116		Pithocarpa pulchella var. melanostigma			
116		Pittosporum undulatum	Υ		
116		Plantago lanceolata (Ribwort Plantain)	Ý		
116		Plantago major (Greater Plantain)	Y		
116		Platysace compressa (Tapeworm Plant)	sammento diministrativo		
116		Platysace deflexa			
116		Platysace filiformis			
117		Platysace pendula			
117		Platysace tenuissima			
117		Platytheca galioides			
117	3. 4525	Platytheca juniperina			

16368 Pyrorchis forrestii

	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query
1244.		Pyrorchis nigricans (Red beaks)			The second
1245.	8195	Quinetia urvillei			
1246.		Racopilum cuspidigerum var. convolutaceum			
1247.		Rhacocarpus purpurascens			
1248.		Rhadinothamnus anceps			
1249.		Rhagodia baccata (Berry Saltbush)			
1250.		Rhagodia baccata subsp. baccata			
1251. 1252.		Rhagodia baccata subsp. dioica (Sea Berry Saltbush)			
1252.		Rhaphidorrhynchium ernoenum Rhodanthe citrina			
1254.		Rhodanthe manglesii			
1255.		Rhodanthe pyrethrum		P3	
1256.		Ricinocarpos glaucus		r3	
1257.		Rinzia schollerifolia			
1258.		Robinia pseudoacacia	Y		
1259.		Romulea rosea (Guildford Grass)	Y		
1260.		Rorippa cygnorum		P2	
1261.	16243	Rosa canina	Y		
1262.	32424	Rosulabryum albolimbatum			
1263.	32425	Rosulabryum billarderi			
1264.	32426	Rosulabryum campylothecium			
1265.	32427	Rosulabryum capillare			
1266.	32429	Rosulabryum torquescens			
1267.	20506	Rubus anglocandicans	Y		
1268.	20496	Rubus laudatus	Y		
1269.	20542	Rulingia apella		P1	
1270.		Rulingia corylifolia (Hazel-leaved Rulingia)			
1271.		Rulingia cygnorum			
1272.		Rulingia grandiflora			
1273.		Rulingia parviflora (Small Flowered Rulingia)			
1274.		Rumex conglomeratus (Clustered Dock)	Y		
1275. 1276.		Rumex crispus (Curled Dock) Rumex frutescens	Y		
1277.			Y		
1278.		Rumex pulcher subsp. pulcher (Fiddle Dock) Rumex x pseudopulcher	Y		
1279.		Sagina apetala (Annual Pearlwort)	Y		
1280.		Salvia verbenaca (Wild Sage)	Y		
1281.		Samolus junceus			
1282.		Samolus repens (Creeping Brookweed)			
1283.	3192	Sanguisorba minor (Sheep's Burnet)	Y		
1284.	2591	Sarcocornia blackiana			
1285.	2593	Sarcocornia quinqueflora (Beaded Samphire)			
1286.	7595	Scaevola anchusifolia			
1287.	7602	Scaevola calliptera			
1288.	7606	Scaevola crassifolia (Thick-leaved Fan-flower)			
1289.		Scaevola glandulifera (Viscid Hand-flower)			
1290.		Scaevola globulifera			54 Harana - Taran Barana (1986)
1291.	7624	Scaevola microphylla (Small-leaved Scaevola)			
1292.	7626	Scaevola nitida (Shining Fanflower)			
1293. 1294.	7646 13175	Scaevola striata (Royal Robe) Scaevola striata var. striata			
1294.		Scaevola thesioides			
1295.		Schizaea fistulosa (Narrow Comb Fern)			
1297.		Schizaea rupestris		P2	
1298.		Schoenolaena juncea		F2	
1299.		Schoenus acuminatus			
1300.		Schoenus bifidus			24 HE = 128 20
1301.	978	Schoenus brevisetis			
1302.	979	Schoenus caespititius			
1303.	983	Schoenus cruentus			
1304.	984	Schoenus curvifolius			
1305.	985	Schoenus discifer			
1306.	986	Schoenus efoliatus			
1307.	992	Schoenus grandiflorus (Large Flowered Bogrush)			
1308.		Schoenus laevigatus			
1309.	997	Schoenus lanatus (Woolly Bog-rush)			
1310.		Schoenus maschalinus			
1311.		Schoenus multiglumis			
1312.		Schoenus nitens (Shiny Bog-rush)			
1313.	1006	Schoenus odontocarpus			

	Name ID	Species Name	Naturalised	Conservation Code ¹ Endemic To Query Area
1314.	1016	Schoenus subbarbatus (Bearded Bog-rush)		
1315.	1017	Schoenus subbulbosus		
1316.		Schoenus subfascicularis	**	
1317.		Schoenus sublateralis		
1318.		Schoenus subliaxus		M*
1319. 1320.		Schoenus submicrostachyus Schoenus tenellus		
1321.		Selaginella gracillima (Tiny Clubmoss)		
1322.		Selliera radicans		P2 Y
1323.		Sematophyllum homomallum		
1324.	32434	Sematophyllum subhumile		
1325.	32483	Sematophyllum subhumile var. contiguum		
1326.	20665	Senecio angulatus	Y	
1327.	8204	Senecio elegans (Purple Groundsel)	Y	
1328.		Senecio glomeratus subsp. longifructus	1.00	
1329.		Senecio hispidulus (Hispid Fireweed)		
1330.		Senecio multicaulis subsp. multicaulis		
1331.		Senecio pinnatifolius		
1332. 1333.		Senecio pinnatifolius var. latilobus Senecio pinnatifolius var. pinnatifolius		
1334.		Senecio quadridentatus		
1335.		Senecio ramosissimus (Auricled Groundsel)		
1336.		Setaria parviflora	Y	
1337.	15972	Silene gallica var. gallica	Y	
1338.	11803	Silene gallica var. quinquevulnera	Y	
1339.	8224	Siloxerus filifolius		
1340.	8225	Siloxerus humifusus (Procumbent Siloxerus)		
1341.	14583	Siloxerus multiflorus		
1342.		Solanum americanum (Glossy Nightshade)	Y	
1343.		Solanum laciniatum (Kangaroo Apple)	Y	
1344.		Solanum nigrum (Black Berry Nightshade)	Y	
1345. 1346.		Solanum symonii Solanum triflorum (Threeflower Nightshade)	Υ	
1347.		Sonchus asper (Rough Sowthistle)	Ý	
1348.		Sonchus hydrophilus (Native Sowthistle)		
1349.		Sonchus oleraceus (Common Sowthistle)	Y	
1350.	1312	Sowerbaea laxiflora (Purple Tassels)		
1351.	4200	Sphaerolobium alatum		
1352.	19337	Sphaerolobium benetectum		P1
1353.		Sphaerolobium calcicola		
1354.		Sphaerolobium drummondii		
1355.		Sphaerolobium fornicatum		
1356. 1357.		Sphaerolobium grandiflorum Sphaerolobium hygrophilum		
1358.		Sphaerolobium linophyllum		
1359.		Sphaerolobium macranthum		
1360.	4207			
1361.	4208	Sphaerolobium nudiflorum		
1362.	17547	Sphaerolobium pubescens		P3
1363.	17548	Sphaerolobium rostratum		
1364.	4211	Sphaerolobium vimineum (Leafless Globe Pea)		
1365.		Sphenotoma capitata		
1366.		Sphenotoma dracophylloides		•
1367.		Sphenotoma gracilis (Swamp Paper-heath)		122
1368. 1369.		Sphenotoma parviflora Sphenotoma sp. Stirling Range (P.G. Wilson 4235)		P3 P3
1370.		Sphenotoma squarrosa		P3
1371.		Spinifex hirsutus (Hairy Spinifex)		
1372.		Spinifex x alterniflorus		
1373.		Sporadanthus rivularis		
1374.		Sporadanthus strictus		
1375.	8710	Sporobolus africanus (Parramatta Grass)	Y	
1376.	635	Sporobolus virginicus (Marine Couch)		
1377.		Spyridia filamentosa		
	4828	Spyridium globulosum (Basket Bush)		1
1378.				
1378. 1379.	14813	Spyridium riparium		P2
1378. 1379. 1380.	14813 6930	Stachys arvensis (Staggerweed)	Y	P2
1378. 1379.	14813 6930 4733		Y	P2

	Name II	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1384	4. 63	Stenotaphrum secundatum (Buffalo Grass)	Y		Aieu
138		Stirlingia divaricatissima	"-ESTATE OF STREET	P3	
1386	6. 231	Stirlingia tenuifolia			
138	7. 232	Strangea stenocarpoides			
1388		Stylidium adnatum (Common Beaked Triggerplant)			
1389		Stylidium amoenum (Lovely Triggerplant)			
1390		Stylidium androsaceum			
139		Stylidium assimile (Bronze-leaved Triggerplant)			
1392		Stylidium caespitosum (Fly-away Triggerplant)			
1393		Stylidium calcaratum (Book Triggerplant)			
1394		Stylidium crassifolium (Thick-leaved Triggerplant)			
1396		2. Stylidium despectum (Dwarf Triggerplant) 3. Stylidium diversifolium (Touch-me-not)			
1397		Stylidium eriopodum			
1398		Stylidium fasciculatum (Pale Beaked Triggerplant)			
1399		Stylidium glaucifolium			
1400		S Stylidium glaucum (Grey Triggerplant)			
140	1. 7734	Stylidium guttatum (Dotted Triggerplant)			
1402	2. 773	Stylidium hirsutum (Hairy Triggerplant)			
1403	3. 774:	Stylidium inundatum (Hundreds and Thousands)			
1404	4. 774	Stylidium junceum (Reed Triggerplant)			
140		Stylidium laciniatum (Tattered Triggerplant)			
1406		Stylidium leeuwinense		P3	
1407		Stylidium luteum (Yellow Triggerplant)			
1408		Stylidium nymphaeum			
1409		Stylidium perpusillum (Tiny Triggerplant)			
1410		Stylidium piliferum (Common Butterfly Triggerplant) Stylidium planirosulum			
1412		Stylidium pritzelianum (Royal Triggerplant)			
1413		Stylidium pulchellum (Thumbelina Triggerplant)			
1414		Stylidium pygmaeum (Pygmy Triggerplant)			
1415		Stylidium repens (Matted Triggerplant)			
1416		Stylidium rhynchocarpum (Black-beaked Triggerplant)			
1417	7. 7796	Stylidium scandens (Climbing Triggerplant)			
1418	3. 7798	Stylidium schoenoides (Cow Kicks)			
1419	9. 3027	Stylidium sp. Kordabup (A.R. Annels 1660)			Y
1420		Stylidium sp. Mt Barker (E.J. Croxford 1906)			
1421		Stylidium spathulatum (Creamy Triggerplant)			
1422		Stylidium spinulosum (Topsy-turvy Triggerplant)			
1423		Stylidium spinulosum subsp. spinulosum			
1424		Stylidium squamosotuberosum (Fleshy-rhizomed Trigger Plant)			
1426		Stylidium tenue Stylidium thryonides			
1427		Stylidium violaceum (Violet Triggerplant)			
1428		Stypandra glauca (Blind Grass)			
1429		Styphelia tenuiflora (Common Pinheath)			
1430		Suaeda australis (Seablite)			
1431		Symphyotrichum squamatum (Bushy Starwort)	Y. Clark		
1432	2. 2322	Synaphea favosa			
1433	3. 15529	Synaphea floribunda			
1434		Synaphea gracillima			
1435		Synaphea incurva		P1	
1436		Synaphea intricata		P3	
1437		Synaphea obtusata			
1438		Synaphea otiostigma		P3	
1439		Synaphea petiolaris (Synaphea)			
1440		Synaphea petiolaris subsp. petiolaris Synaphea petiolaris subsp. triloba			
1442		Synaphea petiolans subsp. triloba Synaphea polymorpha (Albany Synaphea)			
1443		Synaphea reticulata			
1444		Syntrichia antarctica			
1445		Syntrichia papillosa			
1446		Taraxis grossa			
1447		Taxandria conspicua			
1448		Taxandria conspicua subsp. conspicua			
1449		Taxandria fragrans			
1450	. 20113	Taxandria inundata			
1451	. 20115	Taxandria juniperina			
1452		Taxandria linearifolia			
1453	3. 20134	Taxandria marginata			

	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query
1524.	1038	Tricostularia neesii			Alcu
1525.		Tricostularia neesii var. elatior			
1526.	12048	Tricostularia neesii var. neesii			
1527.	17145	Trifolium angustifolium var. angustifolium	Y		
1528.	17542	Trifolium arvense var. arvense	Y		
1529.	17763	Trifolium campestre var. campestre (Hop Clover)	Y		
1530.	4293	Trifolium cernuum (Drooping Flower Clover)	Y		
1531.	4295	Trifolium dubium (Suckling Clover)	Y		
1532.	4298	Trifolium hirtum (Rose Clover)	Y		
1533.	4302	Trifolium ligusticum (Ligurian Clover)	Y		
1534.	14738	Trifolium resupinatum var. resupinatum	Y		
1535.	4312	Trifolium striatum (Knotted Clover)	Y		
1536.	4313	Trifolium subterraneum (Subterranean Clover)	Y		
1537.	15509	Trifolium tomentosum var. tomentosum	Y		
1538.	15821	Triglochin huegelii			
1539.	15820	Triglochin linearis			
1540.	18587	Triglochin nana			
1541.	151	Triglochin striata			
1542.	34964	Trihaloragis hexandra subsp. hexandra			
1543.	35016	Trihaloragis hexandra subsp. integrifolia			
1544.		Tripterococcus brunonis (Winged Stackhousia)			
1545.		Triquetrella tasmanica			Y
1546.		Trithuria bibracteata			
1547.		Trymalium ledifolium var. rosmarinifolium			
1548.		Trymalium odoratissimum subsp. odoratissimum			
1549.		Trymalium odoratissimum subsp. trifidum			
1550.		Trymalium venustum			
1551.		Tyrbastes glaucescens		P4	
1552.		Ulex europaeus (Gorse)	Y		
1553.		Ursinia anthemoides (Ursinia)	Y and		
1554.	7126	Utricularia benthamii			
1555.		Utricularia menziesii (Redcoats)			
1556.		Utricularia multifida			
1557.		Utricularia paulineae			
1558. 1559.	7150	Utricularia simplex (Bluecoats) Utricularia tenella			
1560.					
1561.	7662	Utricularia violacea (Violet Bladderwort) Velleia macrophylla (Large-leaved Velleia)			
1562.	7665	Velleia trinervis			
1563.	8257	Vellereophyton dealbatum (White Cudweed)	Y		
1564.		Verbascum virgatum (Twiggy Mullein)	Y		
1565.	36096	Verbena incompta (Purple-top Verbena)	Year -		
1566.	7108	Veronica arvensis (Wall Speedwell)	Y		
1567.		Veronica calycina (Cup Speedwell)			
1568.	12420	Verticordia endlicheriana var. angustifolia		P3	
1569.		Verticordia endlicheriana var. endlicheriana			
1570.	6080	Verticordia fimbrilepis (Shy Featherflower)			Y
1571.	12424	Verticordia fimbrilepis subsp. australis		т	
1572.		Verticordia habrantha (Hidden Featherflower)		The second second	
1573.		Verticordia plumosa (Plumed Featherflower)			
1574.	12450	Verticordia plumosa var. grandiflora			
1575.		Verticordia plumosa var. plumosa			
1576.	4320	Vicia hirsuta (Hairy Vetch)	Υ		
1577.	11474	Vicia sativa subsp. nigra	Y		
1578.	4325	Viminaria juncea (Swishbush)			
1579.	11137	Vulpia fasciculata	Y		
1580.	724	Vulpia myuros (Rat's Tail Fescue)	Y		
1581.	33101	Vulpia myuros forma myuros	Y		
1582.	7386	Wahlenbergia gracilenta (Annual Bluebell)			
1583.	7389	Wahlenbergia preissii			
1584.	13103	Watsonia borbonica	Y		
1585.	18108	Watsonia meriana var. bulbillifera	Y		
1586.	32455	Weissia controversa			
1587.		Westringia dampieri			
1588.		Wurmbea cernua			
1589.	12072	Wurmbea dioica subsp. alba			
1590.		Wurmbea sinora			
1591.		Xanthorrhoea gracilis (Graceful Grass Tree)			
1592.		Xanthorrhoea preissii (Grass tree)			
1593.	6284	Xanthosia candida			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1594.	18453	Xanthosia eichleri		P3	
1595.	6289	Xanthosia huegelii			
1596.	6292	Xanthosia rotundifolia (Southern Cross)			
1597.	6293	Xanthosia singuliflora			
1598.	19330	Xanthosia tasmanica			
1599.	19938	Xerochrysum bracteatum			
1600.	1144	Xyris flexifolia			
1601.	1148	Xyris indivisa			
1602.	1149	Xyris lacera			
1603.	1150	Xyris lanata			
1604.	32457	Zygodon intermedius			
1605.	36218	Zygodon menziesii			

APPENDIX 5

Fauna species in the Shire of Denmark (Source: NatureMap, January 2011)

Note: not a comprehensive list and may not be the most up to date information available.

NatureMap Species Report

Created By Guest user on 31/01/2011

Current Names Only Yes

Species Group All Animals

Method 'Predefined Area Intersect'

Area Type Shire Boundary

Intersect DENMARK

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1.	24260	Acanthiza apicalis (Broad-tailed Thornbill (Inland Thornbill))			
2.	24261	Acanthiza chrysorrhoa (Yellow-rumped Thombill)			
3.	24262	Acanthiza inornata (Western Thornbill)			
4.	24560	Acanthorhynchus superciliosus (Western Spinebill)			
5.	25535	Accipiter cirrocephalus (Collared Sparrowhawk)			
6.	24281	Accipiter cirrocephalus subsp. cirrocephalus			30
7.	25536	Accipiter fasciatus (Brown Goshawk)			
8.	25011	Acritoscincus trilineatum			
9.	25755	Acrocephalus australis (Australian Reed Warbler)			
10.	25544	Aegotheles cristatus (Australian Owlet-nightjar)			
11.	24310	Anas castanea (Chestnut Teal)			
12.	24312	Anas gracilis (Grey Teal)			
13.	24313	Anas platyrhynchos (Mallard)			
14.	24315	Anas rhynchotis (Australasian Shoveler)			
15.	24316	Anas superciliosa (Pacific Black Duck)			
16.	24088	Antechinus flavipes subsp. leucogaster (Yellow-footed Antechinus, Mardo)			
17.		Anthochaera carunculata (Red Wattlebird)			
18.	24562	Anthochaera lunulata (Western Little Wattlebird)			
19.	24599	Anthus australis subsp. australis			
20.	24285	Aquila audax (Wedge-tailed Eagle)			
21.	24286				
22.		Arctocephalus forsteri (New Zealand Fur Seal)		s	
23.	25558				
24.		Ardea pacifica (White-necked Heron)			
25.		Ardeotis australis (Australian Bustard)		P4	
26.		Arenaria interpres (Ruddy Turnstone)		1000	
27.		Artamus cinereus (Black-faced Woodswallow)			
28.		Artamus cyanopterus (Dusky Woodswallow)			
29.		Atrichomis clamosus (Noisy Scrub-bird)		T	
30.		Austrarchaea mainae (Western Archaeid Spider)		T	
31.		Austromerope poultoni ((scorpionfly))		P2	
32.		Aythya australis (Hardhead)		75	
33.		Bettongia penicillata subsp. ogilbyi (Brush-tailed Bettong, Woylie)		Unit = a participation	
34.		Biziura lobata (Musk Duck)			
35.		Botaurus poiciloptilus (Australasian Bittern)			
36.		Cacatua galerita (Sulphur-crested Cockatoo)			
37.		Cacomantis flabelliformis (Fan-tailed Cuckoo)			
38.		Cacomantis flabelliformis subsp. flabelliformis			
39.		Calidris acuminata (Sharp-tailed Sandpiper)			
40.		Calidris alba (Sanderling)			
41.		Calidris farruginea (Curlew Sandpiper)			
42.	24788				
43.		Calidris tenuirostris (Great Knot) Calidris tenuirostris (Great Knot)			
45.		Calyptorhynchus banksii (Red-tailed Black-Cockatoo)			
		Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black-Cockatoo)		- I	
46.		Calyptorhynchus baudinii (Baudin's Cockatoo)		Ţ	
47.		Callyptorhynchus latirostris (Carnaby's Cockatoo)		Ţ	
48.		Caretta caretta (Loggerhead Turtle)		T	
49.		Cercartetus concinnus (Western Pygmy-possum, Mundarda)			
50.		Chalinolobus gouldii (Gould's Wattled Bat)			
51.		Chalinolobus morio (Chocolate Wattled Bat)			
52.		Charadrius leschenaultii (Greater Sand Plover)			
53.	25576	Charadrius mongolus (Lesser Sand Plover)			

	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query
54.	24376	Charadrius rubricollis (Hooded Plover)		P4	Area
55.		Charadrius ruficapillus (Red-capped Plover)			
56.	24321	Chenonetta jubata (Australian Wood Duck (Wood Duck))			
57.		Cherax cainii (Marron)			
58.		Christinus marmoratus (Marbled Gecko)		•	
59.		Cincloramphus cruralis (Brown Songlark)			
60. 61.		Cincloramphus mathewsi (Rufous Songlark) Circus approximans (Swamp Harrier)			
62.		Cladorhynchus leucocephalus (Banded Stilt)			
63.		Climacteris rufa (Rufous Treecreeper)			
64.	25675	Colluricincle harmonica (Grey Shrike-thrush)			
65.	24613	Colluricincla harmonica subsp. rufiventris			
66.	24399	Columba livia (Domestic Pigeon)	Y		
67.		Coracina novaehollandiae (Black-faced Cuckoo-shrike)			
68.		Coracina novaehollandiae subsp. novaehollandiae			
69.		Corvus bennetti (Little Crow)			
70. 71.		Corvus coronoides (Australian Raven) Coturnix pectoralis (Stubble Quail)			
72.		Coturnix ypsilophora (Brown Quail)			
73.	25595				
74.	25596	Cracticus torquatus (Grey Butcherbird)			
75.	25398	Crinia georgiana (Quacking Frog)			
76.	25399	Crinia glauerti (Clicking Frog)			
77.	25031	Ctenotus catenifer			
78.	25049				
79.		Cygnus atratus (Black Swan)			
80.		Cynotelopus notablis (WA Pill Millipede)	v	т	
81. 82.		Dacelo novaeguineae (Laughing Kookaburra) Daphoenositta chrysoptera (Varied Sittella)	Y		
83.		Dasyornis longirostris (Western Bristlebird)		т	
84.		Dasyurus geoffroii (Western Quoli, Chuditch)		Ť	
85.	24469	Diornedea melanophris subsp. melanophris		т	
86.	24470	Dromaius novaehollandiae (Emu)			
87.	25251	Echiopsis curta (Bardick)			
88.	25096	3 - 4 7 7 7 9			
89.	25098	Egernia luctuosa (Western Swamp Skink)			
90.		Egernia napoleonis			
91. 92.	25103 25250	Egernia pulchra subsp. pulchra Elapognathus coronatus (Crowned Snake)			
93.	25290	Elapognathus minor (Short-nosed Snake)		P2	
94.	33947			Т	
95.	24651	Eopsaltria australis subsp. griseogularis (Western Yellow Robin)			
96.	24652	Eopsaltria georgiana (White-breasted Robin)			
97.	24567	Epthianura albifrons (White-fronted Chat)			
98.		Erythrogonys cinctus (Red-kneed Dotterel)			
99.		Eubalaena australis (Southern Right Whale)		Т	
100. 101.		Eudyptes chrysocome subsp. moseleyi Eudyptula minor subsp. novaehollandiae			
102.		Falco berigora (Brown Falcon)		•0	
103.		Falco cenchroides (Australian Kestrel)			
104.		Falco longipennis (Australian Hobby)			
105.	25624	Falco peregrinus (Peregrine Falcon)		S	
106.	24475	Falco peregrinus subsp. macropus		s	
107.		Falcunculus frontatus (Crested Shrike-tit)			
108.		Falcunculus frontatus subsp. leucogaster		P4	
109.		Falsistrellus mackenziei (Western False Pipistrelle)		P4	
110. 111.		Felis catus (Cat) Fulica atra (Eurasian Coot)	Υ		
112.		Galaxias occidentalis (Western Minnow)			
113.	34029			T	
114.		Galaxiella munda (Western Mud Minnow)		ा	
115.		Galaxiella nigrostriata (Black-stripe Minnow)		Р3	
116.	25729	Gallinula tenebrosa (Dusky Moorhen)			
117.	25730	Gallirallus philippensis (Buff-banded Rail)			
118.		Geocrinia leai (Ticking Frog)			
119.		Geocrinia rosea (Roseate Frog)			
120.		Geotria australis (Pouched Lamprey)		P1	
121. 122.	24271	Gerygone fusca (Western Gerygone) Gerygone fusca subsp. fusca			
123.		Globicephala macrorhynchus (Short-finned Pilot Whale)			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
124.	24735	Glossopsitta porphyrocephala (Purple-crowned Lorikeet)			
125.		Grallina cyanoleuca (Magpie-lark)			
126.	25627	Haematopus fuliginosus (Sooty Oystercatcher)			
127.	24487	Haematopus longirostris (Pied Oystercatcher)			
128.	24293	Haliaeetus leucogaster (White-bellied Sea-Eagle)			
129.	24295	Haliastur sphenurus (Whistling Kite)	· 等等的 計算		
130.	25410	Heleioporus eyrei (Moaning Frog)			
131.	25411	Heleioporus inornatus (Whooping Frog)			
132.	25412	Heleioporus psammophilus (Sand Frog)			
133.	30919	Hemiergis gracilipes			
134.	25117	Hemiergis peronii subsp. peronii			
135.	25734	Himantopus himantopus (Black-winged Stilt)			
136.	24491	Hirundo neoxena (Welcome Swallow)			
137.	24492	Hirundo nigricans subsp. nigricans			
138.	24215	Hydromys chrysogaster (Water-rat)		P4	
139.	24153	Isoodon obesulus subsp. fusciventer (Southern Brown Bandicoot, Quenda)		P5	
140.	24347	Ixobrychus flavicollis subsp. australis		P3	
141.	24511	Larus novaehollandiae subsp. novaehollandiae			
142.	25638	Larus pacificus (Pacific Gull)			
143.	24557	Leipoa ocellata (Malleefowl)		T	
144.	25154	Lerista microtis subsp. microtis			
145.	25005	Lialis burtonis			
146.	24577	Lichenostomus ornatus (Yellow-plumed Honeyeater)			
147.	24581	Lichenostomus virescens (Singing Honeyeater)			
148.	25661	Lichmera indistincta (Brown Honeyeater)			
149.	24582	Lichmera indistincta subsp. indistincta			
150.	25415	Limnodynastes dorsalis (Western Banjo Frog)			
151.	30932	Limosa Iapponica (Bar-tailed Godwit)			
152.	25741	Limosa limosa (Black-tailed Godwit)			
153.	25378	Litoria adelaidensis (Slender Tree Frog)			
154.	25388	Litoria moorei (Motorbike Frog)			
155.	24132	Macropus fuliginosus (Western Grey Kangaroo)			
156.	24133	Macropus irma (Western Brush Wallaby)		P4	
157.	25650	Malurus elegans (Red-winged Fairy-wren)			
158.	25654	Malurus splendens (Splendid Fairy-wren)			
159.	25758	Megalurus gramineus (Little Grassbird)			
160.	25663	Melithreptus brevirostris (Brown-headed Honeyeater)			
161.	24587	Melithreptus chloropsis (Western White-naped Honeyeater)			
162.	25184	Menetia greyii			
163.	24598	Merops ornatus (Rainbow Bee-eater)			
164.	25419	Metacrinia nichollsi (Forest Toadlet)			
165.	24654	Microeca fascinans subsp. assimilis			
166.	33921	Moggridgea tingle (Tingle Trapdoor Spider)		т	
167.	25192	Morethia obscura			
168.	24223	Mus musculus (House Mouse)	Y		
169.	25610	Mylagra inquieta (Restless Flycatcher)			
170.	24146	Myrmecobius fasciatus (Numbat, Walpurti)		Т	
171.	34033	Nannatherina balstoni (Balston's Pygmy Perch)		T	
172.	25427	Neobatrachus sutor (Shoemaker Frog)			
173.	24738	Neophema elegans (Elegant Parrot)			
174.	24739	Neophema petrophila (Rock Parrot)			
175.	24210	Neophoca cinerea (Australian Sea Lion)		S	
176.	25747	Ninox connivens (Barking Owl)			
177.	25748	Ninox novaeseelandiae (Boobook Owl)			
178.	25252	Notechis scutatus (Tiger Snake)			
179.	25564	Nycticorax caledonicus (Rufous Night Heron)			
180.	24350	Nycticorax caledonicus subsp. hilli			
181.	24194	Nyctophilus geoffroyi (Lesser Long-eared Bat)			
182.		Nyctophilus gouldi (Gould's Long-eared Bat)			
183.		Ocyphaps lophotes (Crested Pigeon)			
184.		Oxyura australis (Blue-billed Duck)			
185.		Pachycephala pectoralis (Golden Whistler)			
186.		Pachycephala pectoralis subsp. fuliginosa			
187.		Pachycephala rufiventris (Rufous Whistler)			
188.		Pachyptila salvini (Salvin's Prion)			
189.		Pardalotus punctatus (Spotted Pardalote)			
190.		Pardalotus punctatus subsp. punctatus			
191.		Pardalotus punctatus subsp. xanthopyge (Yellow-rumped Pardalote)			
192.		Pardalotus striatus (Striated Pardalote)			
193.		Pelamis platura (Yellow-bellied Sea-snake)			
401000000000000000000000000000000000000					

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
194.	24648	Pelecanus conspicillatus (Australian Pelican)			
195.		Petroica goodenovii (Red-capped Robin)			
196.		Petroice multicolor subsp. campbelli		22	
197. 198.		Pezoporus wallicus subsp. flaviventrus Phalacrocorax carbo (Great Cormorant)		т	
199.		Phalacrocorax melanoleucos subsp. melanoleucos			
200.		Phalacrocorax sulcirostris (Little Black Cormorant)			
201.		Phalacrocorax varius (Pied Cormorant)			
202.		Phaps chalcoptera (Common Bronzewing)			
203.	25587	Phaps elegans (Brush Bronzewing)			
204.	34045	Phascogale tapoatafa subsp. ssp. (WAM M434) (Brush-tailed Phascogale,		т	
		Wambenger)		345	
205.	24099	Phascogale tapoatafa subsp. tapoatafa (Southern Brush-tailed Phascogale,			
10000	nam anako	Wambenger)			
206.		Phylidonyris melanops (Tawny-crowned Honeyeater)			
207.		Phylidonyris novaehollandiae (New Holland Honeyeater) Physeter macrocephalus (Sperm Whale)		54	
209.		Platalea flavipes (Yellow-billed Spoonbill)		P4	
210.		Platycercus icterotis (Western Rosella)			
211.		Platycercus icterotis subsp. icterotis			
212.		Platycercus spurius (Red-capped Parrot)			
213.		Platycercus zonarius (Australian Ringneck (Ring-necked Parrot))			
214.	24382	Pluvialis fulva (Pacific Golden Plover)			
215.	24383	Pluvialis squatarola (Grey Plover)			
216.	25703	Podargus strigoides (Tawny Frogmouth)			
217.		Podargus strigoides subsp. brachypterus			
218.		Podiceps cristatus (Great Crested Grebe)			
219.		Podiceps cristatus subsp. australis			
220. 221.		Pogona minor subsp. minor Poliocephalus poliocephalus (Hoary-headed Grebe)			
222.		Polytelis anthopeplus (Regent Parrot)			
223.		Pomatostomus superciliosus (White-browed Babbler)			
224.		Pomatostomus superciliosus subsp. ashbyi (White-browed Babbler (western			
		wheatbelt))		P4	
225.	25731	Porphyrio porphyrio (Purple Swamphen)			
226.	24769	Porzana fluminea (Australian Spotted Crake)			
227.	24771	Porzana tabuensis (Spotless Crake)			
228.		Pseudocheirus occidentalis (Western Ringtail Possum)		т	
229.		Pseudonaja affinis subsp. affinis (Dugite)			
230. 231.		Pseudophryne guentheri (Crawling Toadlet)			
232.		Pseudorca crassidens (False Killer Whale) Psophodes nigrogularis subsp. nigrogularis		т	
233.		Pterodroma lessonii (White-headed Petrel)			
234.		Puffinus assimilis (Little Shearwater)			
235.	25008	Pygopus lepidopodus (Common Scaly Foot)			
236.	24243	Rattus fuscipes (Western Bush Rat)			
237.	24245	Rattus rattus (Black Rat)	Y		
238.	24776	Recurvirostra novaehollandiae (Red-necked Avocet)			
239.	30818	Rhinoplocephalus bicolor (Square-nosed Snake)			
240.		Rhipidura fuliginosa subsp. preissi			
241.		Rhipidura leucophrys (Willie Wagtail)			
242. 243.		Sericornis frontalis (White-browed Scrubwren) Sericornis frontalis subsp. maculatus			
244.		Setonix trachyurus (Quokka)		T	
245.		Smicrornis brevirostris (Weebill)			
246.		Sminthopsis gilberti (Gilbert's Dunnart)			
247.		Spicospina flammocaerulea (Sunset Frog)		т	
248.	24645	Stagonopleura oculata (Red-eared Firetail)			
249.	24523	Sterna caspia (Caspian Tern)			
250.	24530	Sterna nereis subsp. nereis			
251.		Stipiturus malachurus (Southern Emu-wren)			
252.		Stipiturus malachurus subsp. westernensis			
253.		Strepera versicolor (Grey Currawong)	Callet		
254.		Streptopelia senegalensis (Laughing Turtle-Dove)	Y		
255.		Tachybaptus novaehollandiae (Australasian Grebe (Black-throated Grebe))			
256. 257.		Tadorna tadornoides (Australian Shelduck (Mountain Duck)) Tarsipes rostratus (Honey Possum, Noolbenger)			
258.		Tasmacetus shepherdi (Shepherd's Beaked Whale)			Y
259.		Thalassarche chlororhynchos (Atlantic Yellow-nosed Albatross)		т т	1.363
260	24944	Throckingsic molyces (Australian Mhite this)		- 2	

24844 Threskiornis molucca (Australian White Ibis)

260.

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
261.	24845	Threskiornis spinicollis (Straw-necked Ibis)			
262.	25203	Tiliqua occipitalis (Western Bluetongue)			
263.	25549	Todiramphus sanctus (Sacred Kingfisher)			
264.	24754	Trichoglossus haematodus subsp. rubritorquis (Red-collared Lorikeet)			
265.	24158	Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)			
266.	24806	Tringa glareola (Wood Sandpaper)			
267.	24808	Tringa nebularia (Common Greenshank)			
268.	24809	Tringa stagnatilis (Marsh Sandpiper)			
269.	24849	Turnix varia subsp. varia			
270.	24851	Turnix velox (Little Button-quail)			
271.	24069	Tursiops truncatus (Bottlenose Dolphin)			
272.	25762	Tyto alba (Barn Owl)			
273.	24852	Tyto alba subsp. delicatula			
274.	25764	Tyto novaehollandiae (Masked Owl)			
275.	24386	Vanellus tricolor (Banded Lapwing)			
276.	25225	Varanus rosenbergi (Heath Monitor)			
277.	24206	Vespadelus regulus (Southern Forest Bat)			
278.	24040	Vulpes vulpes (Red Fox)	Y		
279.	34113	Westralunio carteri		P4	
280.	24083	Ziphius cavirostris (Cuvier's Beaked Whale)			
281.	25765	Zosterops lateralis (Grey-breasted White-eye (Silvereye))			
282.	24856	Zosterops lateralis subsp. gouldi			

Conservation Codes

T - Rare or tikely to become extinct

X - Presumed extinct

IA - Protected under international agreement

S - Other specially protected founa

1 - Priority 1

2 - Priority 2

3 - Priority 3

4 - Priority 4

5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

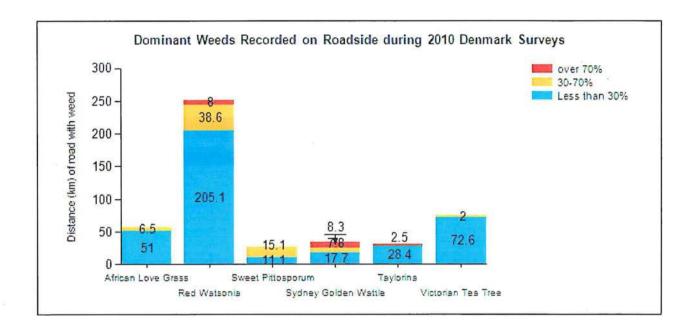
APPENDIX 6

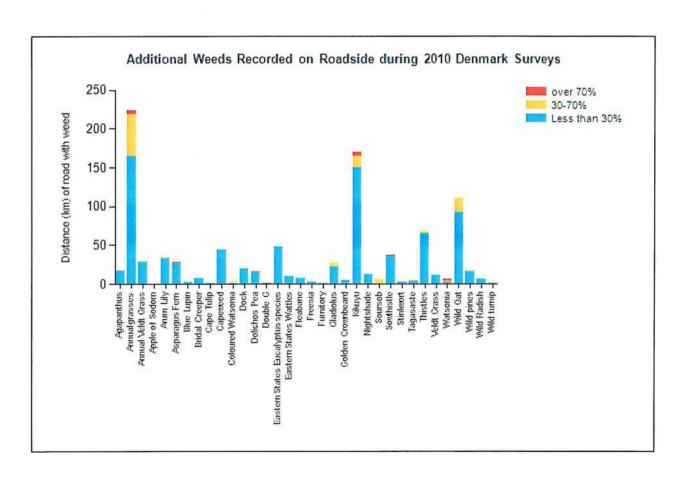
WEEDS RECORDED ON SHIRE OF DENMARK ROADSIDES

Selected Shire:	Denmark	
Weed Common Name	Total Km Found	Avg Percent Coverage
African Love Grass	57.5	30-70% (1.1)
Agapanthus	16.4	Less than 30% (1.0)
Annual grasses	223.6	30-70% (1.2)
Annual Veldt Grass	29.6	30-70% (1.1)
Apple of Sodom	0.2	30-70% (2.0)
Arum Lily	33.7	30-70% (1.0)
Asparagus Fern	28.3	30-70% (1.2)
Blue Lupin	2.6	Less than 30% (1.0)
Bridal Creeper	7.7	Less than 30% (1.0)
Cape Tulip	0.7	Less than 30% (1.0)
Capeweed	44.4	Less than 30% (1.0)
Coloured Watsonia	2.2	30-70% (1.8)
Dock	19.7	Less than 30% (1.0)
Dolichos Pea	15.3	30-70% (1.3)
Double G	0.7	over 70% (3.0)
Eastern States Eucalyptus species	48.1	Less than 30% (1.0)
Eastern States Wattles	9.1	Less than 30% (1.0)
Fleabane	7.2	Less than 30% (1.0)
Freesia	2.7	Less than 30% (1.0)
Fumitory	1.2	Less than 30% (1.0)
Gladiolus	26.9	30-70% (1.1)
Golden Crownbeard	4.8	Less than 30% (1.0)
Kikuyu	169.4	30-70% (1.2)
Nightshade	11.9	Less than 30% (1.0)
Red Watsonia	251.7	30-70% (1.3)
Soursob	5.6	30-70% (2.0)
Sowthistle	37.2	30-70% (1.1)
Stinkwort	1.7	Less than 30% (1.0)
Sweet Pittosporum	26.2	30-70% (1.5)
Sydney Golden Wattle	33.8	30-70% (1.5)
Tagasaste	4.4	30-70% (1.1)
Taylorina	30.9	30-70% (1.1)
Thistles	67.5	30-70% (1.0)
Veldt Grass	10.3	Less than 30% (1.0)
Victorian Tea Tree	74.6	30-70% (1.1)
Watsonia	5.9	30-70% (1.6)
Wild Oat	110.0	30-70% (1.1)
Wild pines	17.5	30-70% (1.1)
Wild Radish	5.8	Less than 30% (1.0)
Wild turnip	1.4	Less than 30% (1.0)

GRAPHS SHOWING WEEDS RECORDED ON SHIRE OF DENMARK ROADSIDES

Graph shows distance of roadside each weed was recorded along and the degree of infestation: less than 30%, 30-70% or greater than 70%









Roadside Conservation Committee



Guidelines For Harvesting On Roadsides

- In all cases the permission of the managing authority, i.e. Main Roads WA, Local Government or DEC, must be sought before native flora is removed from a roadside.
- Flora removal should be from only designated roads, which have wider vegetated road verges i.e. vegetation width > 3metres.
- The number of operators authorised to remove flora from a roadside should be strictly limited to that
 which can be sustained and managed. The determination of this is at the judgement of the managing
 authority, but consideration should be taken of the type of flora being harvested and an evaluation of
 monitoring of the impact of the harvest activity. Advice may be sought from DEC or the RCC.
- Approval for flora harvesting should be for a set period, with a review of the impact and operation before renewal.
- Approval should also stipulate approved methods of harvesting, the species which may be harvested, and the quantity of material to be taken. Advice on harvest conditions may be obtained from DEC.
- Any flora removed should not affect the viability of the residual seed bank. It is recommended that
 no more than 20% of the flowers or seed on a plant should be taken, unless it is in an area that is
 scheduled to be cleared as part of road management.
- Methods of harvesting flora should not jeopardise the survival of the plant/tree, unless it is in an area
 that is scheduled to be cleared as part of road management.
- The removal of whole plants should be restricted to areas that are scheduled to be cleared as part of
 road management. Note, some species of flora such as zamia palms and grass trees cannot be
 removed for commercial purposes without a special endorsement on the Commercial Purposes
 Licence issued by DEC.
- No flora of special conservation concern (Declared Rare Flora or Priority Flora) should be removed without special authorisation through DEC.
- No commercial harvesting of any plant product should be allowed for any reason between the markers that delineate a Environmentally Sensitive Areas defined in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004.
- Flora harvesting should be prohibited from designated Flora Roads.
- Care should be taken that access to Dieback infected areas is limited to the drier months of the year, and vehicular access disallowed.
- Safety should always be of prime concern and every effort should be made to ensure that personal safety is a key consideration in any harvesting operation.
- Flora harvesters should not operate from the roadside in areas where the vegetation is close to the road, where vehicles cannot be safely parked off the road, or where there is poor driver visibility.

For more information contact:

Roadside Conservation Committee

17 Dick Perry Drive, Kensington, WA 6151

Phone: (08) 9423 2423

Fax: (08) 9423 2199

Postal address:

Locked Bag 104, Bentley Delivery Centre,

Bentley, WA, 6983.

Roadside Conservation Committee



Guidelines for Managing the Harvesting of Native Flowers, Seed and Timber from Roadsides

Introduction

The diversity of values associated with roadside vegetation is well documented and acknowledged. In landscapes that have been extensively cleared, roadside vegetation provides essential wildlife corridors and habitat for local flora and fauna, including a number of threatened species. Hence it is highly desirable that this asset is managed in such a way as to ensure its conservation and sustainability. The control and management of roadside vegetation is the responsibility of the road manager. Local government authorities, as road managers, are often approached for 'permission' to take various flora products from the roadside. These requests are mainly for wildflowers, native seed and firewood. Other products which may be sought include material for making didgeridoos, other types of craft wood, and stakes or poles for various purposes.

The implementation of these simple guidelines by road managers for the removal of flora and timber material from the roadsides will ensure that the vegetated roadside reserve is maintained for its biodiversity values, and the benefit of the community and road users.

In some instances the Roadside Conservation Committee (RCC) is supportive of the sustainable harvesting of flora, such as salvage (removal of dead material that is not significant wildlife habitat or is material to be destroyed by road works), or the selective collection of seed for revegetation. However, each case should be viewed on its merits and any decision to facilitate harvesting from roadsides should be referred to the Department of Environment and Conservation (DEC) (previously CALM) and/or the RCC for advice. Licences allowing the taking of roadside flora may be issued by DEC when supported by the road managing authority.



Guidelines for Managing the Harvesting of Native Flowers, Seed and Timber from Res

Legislation

All Western Australian native flora is protected under the *Wildlife Conservation Act 1950*. Native flora includes all parts of a native plant, including its flowers, seed, and timber. Protection of native flora under the Act means that a person can only take (cut or remove) native flora from Crown land under a licence

Road and rail reserves are Crown land, and hence a licence is required to cut or remove any native flora from a roadside or rail line. There is, however, a legal provision by which the road manager or their agent (contractor) does not require a licence whilst undertaking legitimate road management activities, such as those approved under the *Environmental Protection (Clearing of Native vegetation)*Regulations 2004. This provision does not extend to other persons who wish to take protected flora from roadsides.

There are two types of licences that apply to the taking of protected flora from Crown land: Commercial Purposes Licences, where the flora is being taken for any commercial purpose; and Scientific or Other Prescribed Purposes Licences, where the protected flora is being taken for specific non-commercial purposes.

In issuing a licence, DEC is required to be assured that the activity will not compromise the conservation of the flora. In determining this, DEC will seek advice from the road manager to determine the potential impact of the activity, and how the activity relates to the management objectives being applied to that land.

A licence application may be refused if the activity is either a conservation concern, or does not fit in with the management objectives of the road manager. Once issued with a licence, a licensee must comply with the conditions of the licence that are designed to ensure the activity does not adversely impact on the conservation of the flora or the natural environment in which it occurs.

Commercial Wildflower Harvesting

Western Australia is referred to as the 'Wildflower State', and its wildflowers attract a significant number of tourists each year. Roadside vegetation provides the most accessible, and hence the most commonly viewed, array of wildflowers, and as such are an important feature of regional tourism, potentially providing a significant financial boost to local economies. Wildflower harvesting in many instances detracts from the biodiversity and tourism values of the roadside and should therefore be discouraged.

The RCC considers that the flora on roadsides is reserved and maintained for public benefit. It is therefore seen as a contradiction of purpose to allow wildflowers on roadsides to be harvested, particularly for private gain, and this activity should not be permitted.

However, there are situations where some harvesting may be considered, such as in very wide road reserves where the activity can be screened from road users and has a smaller impact on biodiversity. It is often the case that flora is harvested from roadsides because of the convenience of access, and harvesters should be directed to find alternative locations. Road managers have been discouraged from supporting or allowing such harvesting to occur, but if harvesting is to be approved, then the points provided at the end of these guidelines should be considered.

Seed Collection

Throughout much of the south west, revegetation of the native flora is being undertaken to redress the problems that historic clearing has created. Increasingly, this revegetation is aimed at using local native flora so as to recreate the native vegetation to support biodiversity objectives. The paradox is that in many areas the native vegetation has been cleared to such an extent that adequate sources of native seed cannot be found for undertaking this work. Roadside vegetation may be one of few sources of such seed.

Seed production is an important component of remnant vegetation. Some species, called re-seeder species, regrow only from seed when plants are either killed by an event, such as fire, storm damage, or die as part of their natural cycle. The maintenance of adequate seed of these species is necessary as a precaution to ensure the continuity of the flora biodiversity.

Native seed is also an important food source for native fauna living in roadside vegetation, from ants to birds and mammals. The maintenance of this fauna is important for the continuing survival of the vegetation, especially where the fauna is required to pollinate the flora.

When seed is needed for *bona fide* revegetation projects within the local community, and no other source of local seed is available, then the managing authority may consider giving permission for collection of seed from roadsides. Such collection must be under the appropriate licence issued by DEC and the harvesting should be done in a way that does not endanger the long-term survival of the roadside vegetation.

Where seed collection is to be authorised on roadsides, the road manager should consider the points listed at the end of these guidelines. Specific consideration should be given to the methods that are approved for harvesting the seed, the quantity of seed that may be taken, and the species from which the seed is to be sourced.

Timber Harvesting from Roadsides.

Timber is harvested for a range of reasons, including saw logs, firewood and craft wood. Due to the ease of access, timber harvesters may wish to source timber from roadside vegetation for these purposes.

Roadside managers are encouraged to retain timber on roadsides as an important component of the natural habitat, which fulfils ecological, aesthetic and land management functions. Fallen logs and branches within the roadside create important habitat for many species of insects, reptiles, mammals and birds, thus enhancing the roadside biodiversity. Insects and reptiles that live in fallen timber are also important elements of the food chain, and are very important to the functioning of natural systems, and the survival of many other native animals.

The RCC recommends that harvesting of timber from roadsides should not be permitted except in defined road safety, fence line or service clearance zones, or where a tree has fallen, or appears likely to fall into clearance zones.

Where timber removal is to be allowed, consideration should be given to the points raised at the end of these guidelines, especially in relation to safety issues related to timber cutting. Permission to remove timber should be specific to certain sections of roadsides where the removal is necessary for other planned road management purposes.





Guidelines for the Nomination and Management of Flora Roads



The RCC has been coordinating a volunteer roadside survey program since 1989, which provides a list of high conservation value roads within many Shires in the agricultural areas of this state. These roadsides can be investigated further to see if

they warrant declaration as a Flora Road. Nevertheless, roadsides that have not been surveyed may still be nominated.

Any person may suggest to the managing authority or to the RCC that a road, or a section of road fits the criteria of a Flora Road. However, only the managing authority in whom care, control and management of the road is vested can officially declare it a Flora Road.

A road may be nominated as a Flora Road by submitting a written request to the RCC. The RCC requires the following information:

- · endorsement from the managing authority;
- name of the road, Local Government Authority, and the road manager (MRWA, Local Government or CALM);
- · distance of the proposed Flora Road; and
- · width of the road reserve.

ROAD

9 km

The following information would also be useful:

- · photograph(s) of the road;
- · a list of the dominant plant species; and
- · threats such as weeds, disturbances, etc.

This information is stored in the RCC Flora Roads Register, a database that is maintained by the RCC Technical Officer (Mapping).



Given that only the managing authority can officially declare a road, or section of road as a Flora Road, it is important to have the support of the road manager.

The RCC will provide two Flora Road signs to the managing authority. The signs are in the tourist sign colours of white letters and symbols on a leaf brown background. It is the responsibility of the managing authority to erect the signs, and to provide signposts, auxiliary signs and carry out maintenance. One sign may be placed at each approach to the area.

Management Implications

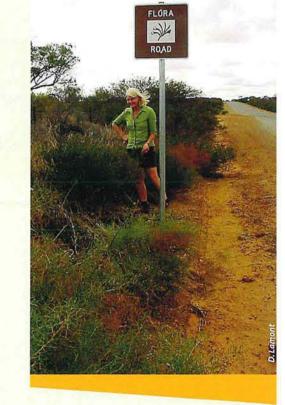
A standard sign was developed by Main Roads WA in the late 1980's; a policy for the erection of Flora Road signage was developed shortly afterwards.

Part16 of the RCC Roadside Manual details the establishment and management of Flora Roads. The RCC's Guidelines for Managing Special Environment Areas in Transport Corridors and the Roadside Handbook also provides information on Flora Road establishment.

The aim of all management should be to minimise any disturbance to the roadside flora, consistent with the provision of a safe and efficient roadway.

The managing authority will be expected to take into consideration the high conservation values present, and take special care when working within the Flora Road road reserve and the surrounding area. More specifically though;

- Council may choose to adopt a policy on Roadside Conservation;
- environmental assessments (pre-construction checklists) should be completed prior to any upgrade work, to assist with planning for flora preservation;
- fire management should be undertaken in such a way so as to take into account the ecological needs of the flora; and
- where rehabilitation is contemplated, local native species should always be used.





Verge*Notes*





Tourism Implications

Declared Flora Roads will, by their very nature, be attractive to tourists, and would often be suitable as part of a tourist drive network.

Consideration should be given to:

- · promoting the road by means of a small brochure or booklet;
- eventually showing all Flora Roads on a map of the region or State;
- · using specially designed signs to delineate the Flora Road section; and
- constructing roadside flora rest areas where people can get out and enjoy the flora.
 Walk trails could be made from these, and information brochures produced.

The RCC has established links with the W.A. Tourism Commission for inclusion on wildflower tourist publications.

Flora Road Register

To ensure that knowledge of Flora Roads sites does not get lost, due perhaps to staff changes, the RCC has established a Flora Roads Register. Information pertaining to each Flora Road (i.e. road name, location, length, etc) will be stored in the Flora Roads database, and updated as necessary.

In order to plan roadworks so that these important areas of roadside vegetation are not disturbed, road managers should also know of these areas. Therefore, it is suggested that the Managing Authority establishes a *Register of Roads Important for Conservation* also. This register should be consulted prior to any works being initiated in the area.

For more information contact:

Roadside Conservation Committee

17 Dick Perry Avenue, Kensington, WA 6151

Phone: (08) 9334 0423

Fax: (08) 9334 0199

Postal address:

Locked Bag 104, Bentley Delivery Centre,

Bentley, WA, 6983.

Roadside Conservation Committee



Introduction

The Flora Roads program began as an initiative of the Roadside Conservation Committee (RCC), as a means of encouraging road managers to protect and conserve roadside vegetation of high conservation value.

Flora Roads highlight areas of high conservation flora as a tourist asset to local communities. These are easily identified to passing travellers as areas worthy of an inspection to view the local flora.

The Roadside Conservation Committee has defined Flora Roads as "those roads which have conservation value owing to the vegetation growing within the reserve".

Principle Conservation Values of Flora Roads

- The roadside must contain a significant population of native vegetation.
 Introduced trees and grasses are not important for conservation.
- The native vegetation must be in as near to its natural condition as possible. In undisturbed vegetation, several layers of plants occur – trees, shrubs and herbs are present in woodlands, for example. If one or more of the expected layers are missing, the conservation value is reduced.
- The roadside may be the only remaining example of original vegetation within a cleared area. It thus:
- assists in vegetation mapping and distribution studies;
- provides a benchmark for study of soil change during agricultural development;
- provides a source of local seed for revegetation projects;
- acts as a wildlife habitat for the protection of fauna;
- harbours rare or endangered plants in the roadside;
- may provide nest sites and refuges for native animals; and
- may act as a biological corridor.



Roadside Conservation Committee

Flora Road Nomination Form

For enquiries phone 9334 0423

Name of person making nomination:		
Date:		FLORA
Contact details: Phone: Fax: Email: Postal address:		ROAD
General Information: Road Name:		_
Locality:Shire:		5.1
Road Reserve Details: Length of road section (km):	roadside #	fermation roadside road reserve
Is the road close to a Main road or Highway? (Please name)		
Have RCC roadside surveys been carried out previously?		
Are there other values are present? (i.e. landscape, cultural, tourism,		
Other information/comments:		
Please include photos if possible. Photos should show the ro	ad as part of a	a landscape

rather than close ups of particular plant species.

To nominate a Flora Road, please fill in this form and send to the Roadside Conservation Committee via:

Post- Locked Bag 104, Bentley Delivery Centre, Bentley, WA 6983. Fax- (08) 9334 0199.

Email- rcc@dec.wa.gov.au