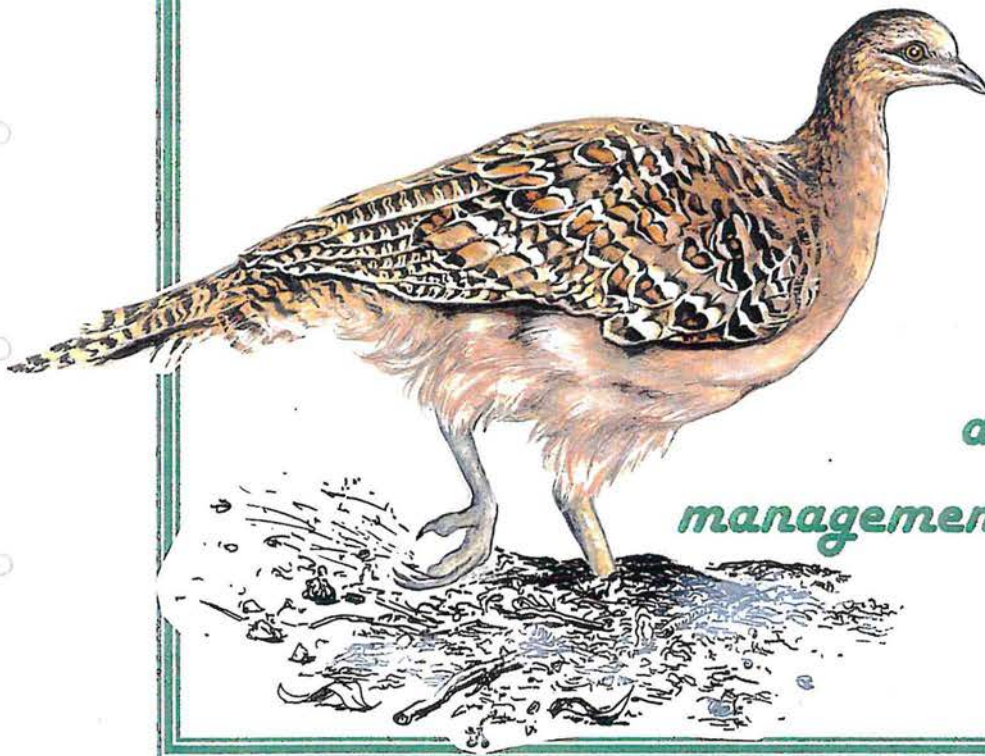


*A survey of the roadside conservation  
values in the Shire of Snowangrup*



*and roadside  
management guidelines*

June 1999 - Roadside Conservation Committee

2nd edition



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## Introduction

The Shire of Gnowangerup covers an area of 5000 km<sup>2</sup> and supports a population of approximately 1700 people. The area experiences a mediterranean climate with a mean annual rainfall of 384.2 mm. Seasonal temperatures are characterised by warm summers, with maxima averaging from the mid to high twenties, and mild winters, with maxima in the mid teens. Mean daily maximum and minimum temperatures and rainfalls are shown below.

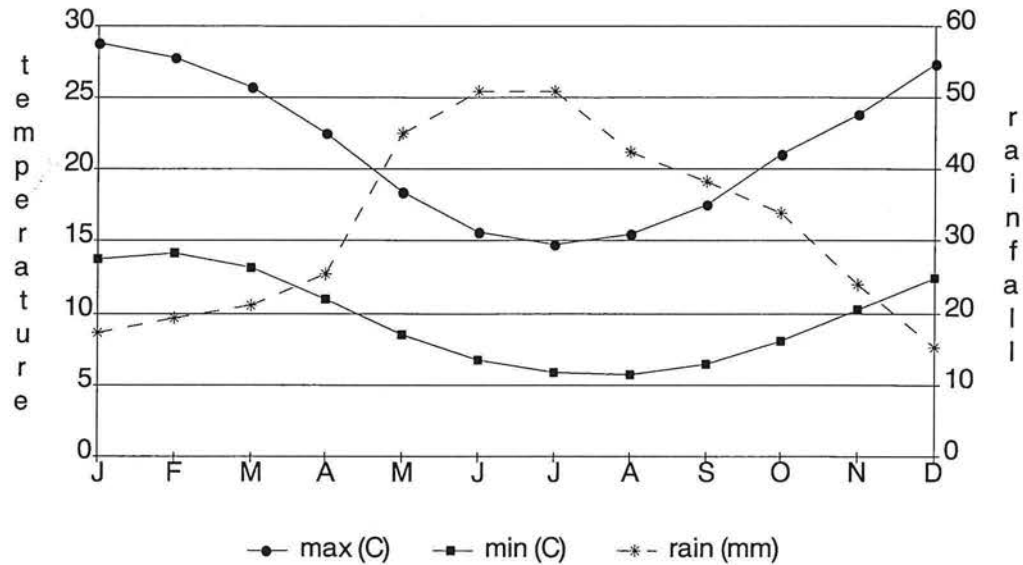


Figure 1. Mean daily maximum and minimum temperature (C) and rainfall (mm) in the Shire of Gnowangerup (measured at Ongerup).

Gnowangerup is located 354 km south east of Perth in Western Australia's south west land division. Typical of the region, the major agricultural pursuits are cereal crops, sheep and cattle. Tourism is also an important industry with the area's spectacular natural resources being a major attraction. Salient features of the area being the Stirling Ranges and the flora and fauna which abound in the area. Each year the Ongerup Wildflower Show provides visitors with easy access to some of the diverse range of unique local flora. Based on WA Herbarium records nearly 2000 species of plants have been recorded from the Shire of Gnowangerup. This includes more than 90 species of acacia, 26 species of boronia, 32 species of spider orchid and a staggering 128 species of eucalypt. By way of comparison, the United Kingdom supports a flora of approximately 2000 species. However, it is of concern to note that 110 species of exotic plants are also recorded within the shire.

## Value of Roadsides

Since the settlement of Western Australia by Europeans, large areas of native vegetation in the south west of the state have been cleared to make way for agriculture and other development ventures. The fragmentation of the more or less continuous tracts of native vegetation suites by clearing has resulted in the isolation of plant and animal populations and communities. Populations isolated and restricted to these man made biogeographical islands of small remnants are prone to food shortages, disease and reduced genetic diversity. However the presence of native vegetation along roadsides can often assist in alleviating this isolation effect by providing corridors between bush remnants, thereby facilitating the movement of biota across the landscape. Unfortunately

the protective mantle afforded by the native flora has been badly depleted with now only 5% (approximately 226km<sup>2</sup>) of the remnant vegetation remaining in the Shire of Gnowangerup. (Beeston et al, 1993).

Remnant native vegetation includes more than just trees. Trees, shrubs and ground covers (creepers, grasses and herbs) combine to provide valuable food and shelter for different types of wildlife. Existing native vegetation will require less maintenance if left undisturbed.

**Trees are good - bush is better** - native trees, shrubs and grasses on the roadside are valuable because they:

- often are the only remaining example of original vegetation within cleared areas;
- are easier to maintain and generally less fire prone than introduced vegetation;
- provide habitat for many native species of plants, mammals, reptiles amphibians and invertebrates;
- provide wildlife corridors linking other areas of native vegetation;
- often contain rare and endangered plants and animals; (Currently, 321 plant species are declared rare under the wildlife conservation act 1950-1979. Of these, more than 100 are known to be from roadside populations. In fact, roadside plants represent more than 80 per cent of the known populations of 40 of the 'declared rare' species and three of these are known only to exist in roadside populations).
- provide the basis for our important wildflower tourism industry; (The aesthetic appeal of well-maintained roadsides should not be overlooked and they have the potential to improve local tourism and provide a sense of place. As well as creating a more favourable impression of an area, roadsides attract tourists who visit specifically to view wildflowers).
- often contain sites of historical or cultural significance;
- provide windbreaks and stock shelter areas for adjoining farmland; (This can help stabilise temperature and reduce evaporation, and thereby providing microhabitat more suitable to higher levels of productivity. Well conserved roadsides also assist with erosion and salinity control. In addition, native vegetation on roadsides is generally far less of a fire threat than annual weeds. Undisturbed roadsides provide a bench mark for the study of soil change during agricultural development).
- are a vital source of local seed for revegetation projects; (In lieu of other alternatives and cognisant of limitations; road reserves can also provide a valuable source of seed for regeneration projects. This is especially pertinent to shrub species, as clearing and grazing beneath farm trees often removes this layer).

Approval of the local shire and a CALM permit are required prior to collection.

In a time of rapid change where the demands placed on the natural world are many, it is vital that there is a coordinated management of lands across all tenures to ensure the sustainability and integrity of the natural biota and processes, agricultural lands and service infrastructure. It is somewhat ironic that the reserves established to cater for a transport system in a modern world are now an integral component of this coordinated management approach.

**Roadsides are the vital link .....and a priceless community asset.**

## Legislation

Uncertainty often exists in the minds of many with regard to the 'ownership' control and management of the roadside per se. When a public road is created, a corridor of land is dedicated for a road, i.e. a road reserve. The road formation and its associated infrastructure are accommodated within the road reserve. The remaining area on each side of the road is called the road verge or roadside. It is in the control and management responsibilities of this area (and flora and fauna residing within it) that the uncertainty exists

Public roads other than main roads are dedicated under the Local Government Act (Part XII). Dedication places care and management of the road (street) in the relevant local government authority. However, under Section 286 of the Local Government Act, land in a road is the absolute property of the Crown, i.e. still Crown land.

Road reserves may be created in the following ways:

- by approval of a crown subdivisional plans, s.294a of the local government act.
- by approval of a freehold subdivisional plan, s.295 (5) of the local government act.
- by approval of a survey plan (crown or freehold), s.28 of the town planning and development act.
- by dedication of crown land (often following acquisition under the public works act), ss.287 and 288 of the local government act.
- by a local government undertaking work on a private street, s.296 of the local government act.

When a street is dedicated to a public use, it becomes Crown land under the Land Act, pursuant to s.286 of the Local Government Act. Care, control and management rest in the relevant local government (s.300 of the Local Government Act) unless the road is declared a highway, main road or secondary road under the Main Roads Act. In the latter case, care, control and management vests in the Commissioner of Main Roads (ss.15 and 26 of the Main Roads Act). Main Roads Western Australia, rather than DOLA, administers those roads placed under their management responsibility.

The Local Government Act appears to be written in an urban context, and does not refer specifically to the management of the roadside; rather it only refers to the road itself. It is therefore difficult to determine to what extent the Act places the care, control and management of the roadside with the local government authority in the case of dedicated roads. It is, however, suggested that where a local government authority is managing a road (reserve) that authority may undertake reasonable management of the roadside to facilitate the roadway, including making the road safe and convenient to use.

With the proclamation of the Wildlife Conservation Act 1950 the responsibility for flora conservation, including the control of harvesting of protected flora, this includes seed, was given to the Minister of the Crown responsible for Fisheries and Wildlife and the Department of Fisheries and Wildlife. With the formation of the Department of Conservation and Land Management (CALM) in 1984 and the accompanying Conservation and Land Management Act 1984 the conservation and management of all native wildlife passed to the Minister responsible for that Department and the Department itself. As a consequence CALM has the authority to exert controls.

Main Roads Western Australia manages Albany-Lake Grace Rd, Broomehill-Jerramungup Rd and Gnowangerup-Stirling Range Rd, and the Shire of Gnowangerup manages all other roads in this survey.

## Assessment Process

### Methods

The methods to assess and calculate the conservation value of the roadside reserves are described in Hussey (1991). The process involves scoring a set of pre-selected attributes, which, when combined, represent a roadside's conservation status. A list of these attributes is presented on a standard survey sheet, see Appendix 2. This provides both a convenient and uniform method of scoring. Ideally, 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. Lamont and Blyth (1995).

Fieldwork was carried out from May 95 to November 98. The surveyors were:

Carolyn Faulkner, Kaye Vaux, Bronwyn Crouch, Beth Gaze, Steve Newbey, Fran Souness, Gary Souness, Lynda Strahan, Ross Strahan, Jenny Ireland, Judy Moir, Jean Brown, Sally Milne, Mary Milne, Beattie Stewart, Sue Osborne, Eunice Faulkner, Len Faulkner, Kath Fisher, Jan House, Susanne Dennings, Alan Dennings, Sandy Vaux, Annabelle Hinkley, Penny Moir, Jan Savage, Kelly O'Neill and Judy O'Neill.

The efforts of the Malleefowl Preservation Group, who completed the final stage coordination, and the enthusiastic efforts of the volunteer surveyors ensured that this project was successfully completed. It is now hoped that the data collected will be used by all sectors of the community who have an interest in the roadside environment.

### Quantify Conservation Values

The following attributes were used to assess a quantitative measure of conservation value:

- native vegetation on roadside;
- extent of native vegetation along length of roadside;
- number of different native species;
- weed infestation;
- value as a biological corridor;
- predominant adjoining land use.

Each of these attributes was given a score ranging from 0 to 2 points. The combined scores provide a conservation score ranging from 0 to 12. The conservation values, in the form of conservation status categories, are represented by the following colour codes

Conservation Value	Conservation Status	Colour Code
9 - 12	High	Dark Green
7 - 8	Medium High	Light Green
5 - 6	Medium Low	Dark Yellow
0 - 4	Low	Light Yellow

Table 1: Colour codes used to depict the conservation status of roadsides.

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

- width of road reserve;
- width of vegetated roadside;
- presence of utilities/disturbances;
- dominant native species;
- dominant weeds;
- fauna observed;
- general comments.

It is felt that the recording of these attributes will provide a community database that would provide information useful in many spheres local government and community interest.

### Mapping

A computer generated (GIS Arc Info) map, at a scale of 1:100 000, depicting the conservation status of the roadside vegetation and the width of the road reserves within the Shire of Gnowangerup was produced. The data used to produce both the map and the following figures and tables are presented in Appendix 3.

The roadside conservation values map initially provides an inventory of the status quo of the condition of the roadside vegetation. This is important as 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 per se, 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 fire management techniques or regimes and weed control programmes.

The map can also be used as a reference to overlay transparencies of other information relevant to roadside conservation. Data obtained from CALM and the Agricultural Department can be used to produce an overlay map that depicts the location of remnant vegetation on both the Crown estate and privately owned land. This enables the roadside vegetation to be assessed in the context of its importance to the shire's overall conservation network. Other transparencies, 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.

As well as providing a road reserve planning and management tool, the survey data can also be used for:

- regional or district fire management plans;
- tourist routes - roads depicted as high conservation value would provide visitors to the district with an insight to the flora of the district;
- landcare/bushcare projects - would be able to incorporate the information from this survey into 'whole of' landscape projects.



## Survey Data Results

A summary of the general roadside conditions in the Shire of Gnowangerup is presented in Table 2. The survey data have been combined to provide the total kilometres, and percentages, of roadside occupied by each of the conservation status categories and the attributes used to calculate the conservation values (Table 2).

Conservation Status (km)			Native Vegetation on Roadside (km)			Weed Infestation (km)		
High (9-12)	490.0	21.3%	2 - 3 veg layers	1695.3	73.6%	Light (2)	556.9	24.2%
Med (7-8)	660.7	28.7%	1 veg layer	490.9	21.3%	Medium (1)	1129.3	49.0%
Med (5-6)	564.0	24.5%	0 veg layers	118.1	5.1%	Heavy (0)	618.0	26.8%
Low (0-4)	589.4	25.6%						
			Total	2304.2	100.0%	Total	2304.2	100.0%
Conservation Values (km)			Extent of Native Vegetation (km)			Value as Biological Corridor (km)		
0	45.0	2.0%	>80%, Good (2)	556.9	24.2%	High (2)	1208.4	52.4%
1	67.7	2.9%	20-80 % Med (1)	1129.3	49.0%	Medium (1)	739.5	32.1%
2	128.6	5.6%	<20% Low (0)	618.0	26.8%	Low (0)	356.3	15.5%
3	172.2	7.5%						
4	175.9	7.6%	Total	2304.2	100.0%	Total	2304.2	100.0%
5	269.5	11.7%						
6	294.6	12.8%	Number of Native Species (km)			Adjoining Land Use (km)		
7	355.5	15.4%						
8	305.3	13.2%	Over 20 (2)	586.7	25.5%	Cleared	239.3	10.4%
9	302.6	13.1%	6 - 19 (1)	1016.5	44.1%	Scattered	1840.0	79.9%
10	185.9	8.1%	0 - 5 (0)	701.0	30.4%	Uncleared	184.5	8.0%
11	1.5	0.1%				Other	40.5	1.8%
12	0.0	0.0%	Total	2304.2	100.0%	Urban	3.0	
						Railway	5.0	
Total	2304.2	100.0%				Drain	17.6	
						Plantation	14.9	
						Total	2304.2	100.0%
Period of survey: May 1995 to November 1998.								

Table 2: Summary of roadside conditions along roads in the Shire of Gnowangerup. As roadsides occur on both sides of the road, roadside distances (km) are equal to twice the actual distance of road travelled.

Roadside sections of high conservation value covered 490 km of roadside, 21.3% of the length of roadside surveyed. Medium-high conservation areas accounted for 660.7 km of roadside, 28.7% of the total surveyed. Medium-low conservation roadside covered 564 km, 24.5% of the total surveyed. Areas of low conservation occupied 589.4 km, 25.6% of the roadside surveyed (Table 2, Figure 2).

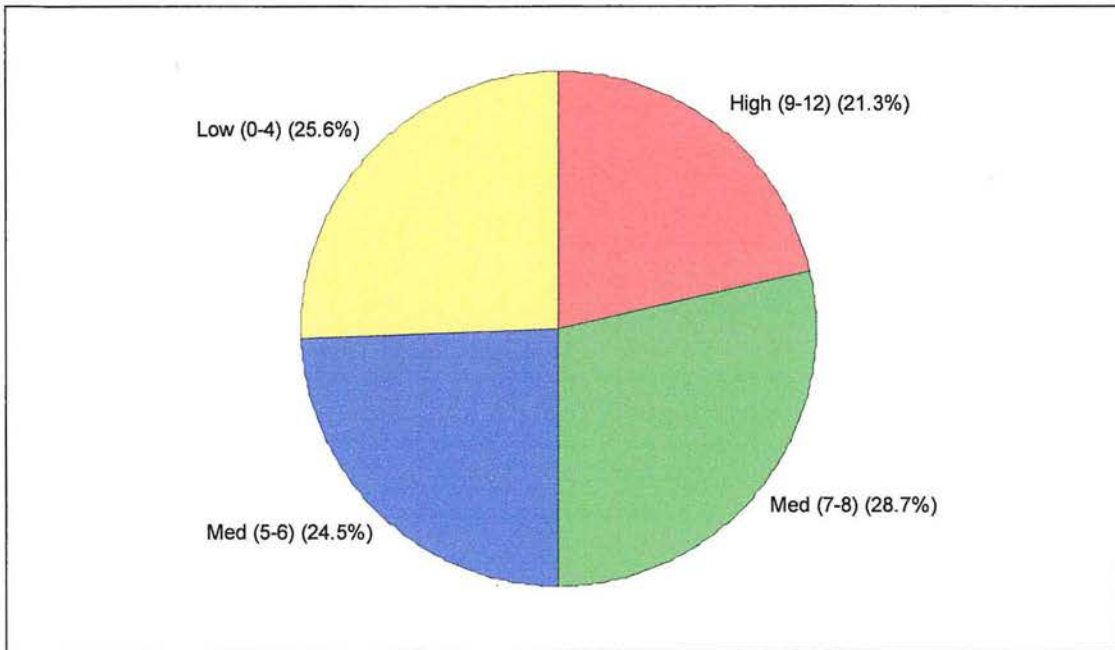


Figure 2: Conservation Status of roadsides in the Shire of Gnowangerup

The *Native Vegetation on Roadside* value is determined from the number of native vegetation layers from either the tree, shrub or ground layers. Sections with at least two layers of native vegetation covered 73.6% of the roadside, 21.3% had only one layer and 5.1% had no layers of native vegetation (Table 2, Figure 3).

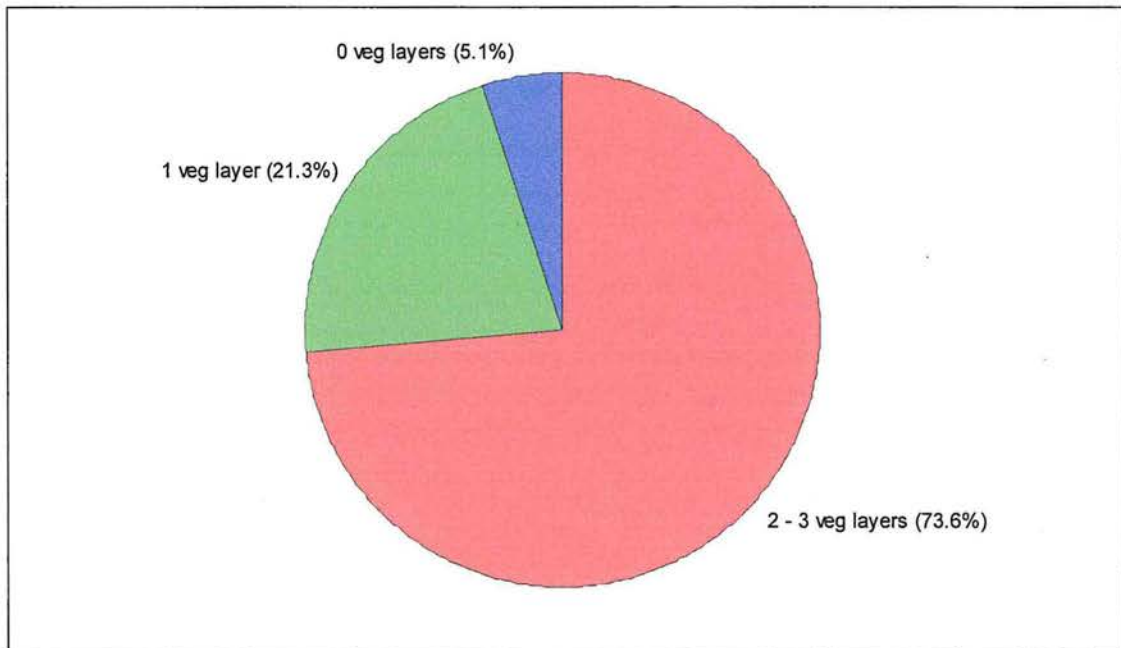
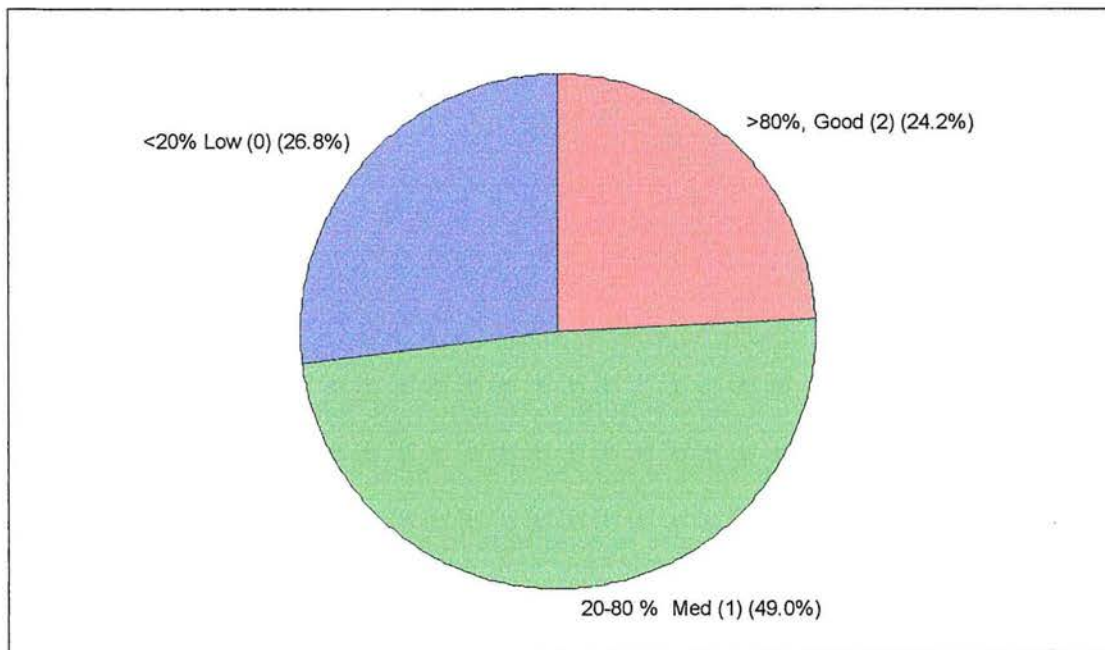


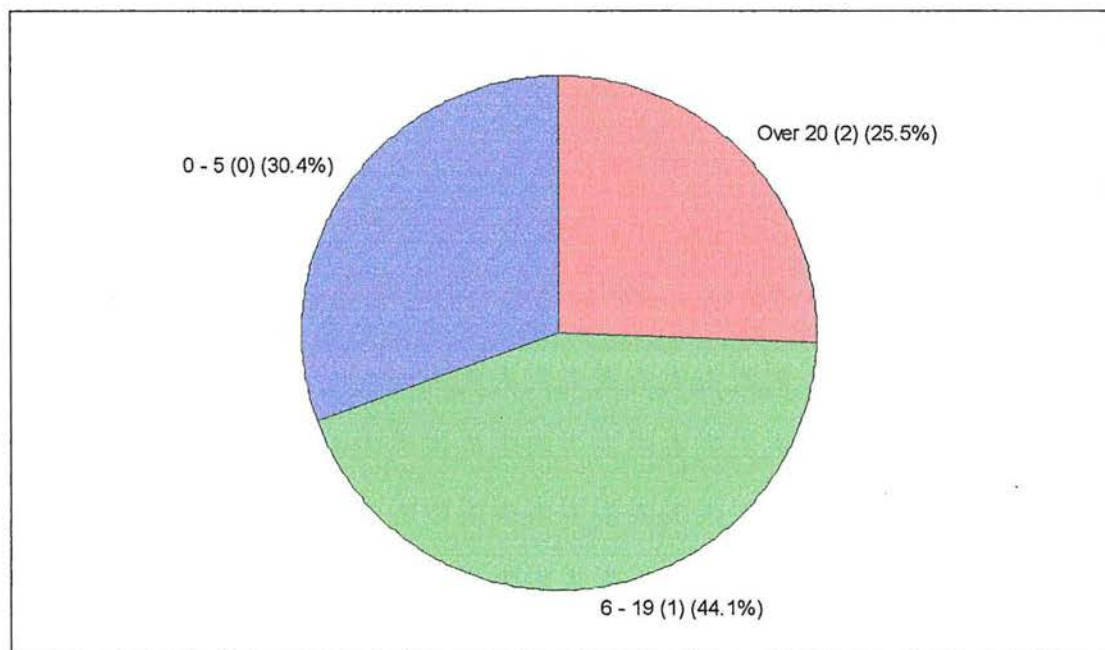
Figure 3: Native Vegetation on Roadside

Roadside vegetation with *Extent of Native Vegetation* value deemed as good, ie with native vegetation cover greater than 80% occurred along 24.2% of the length of roadside surveyed. Survey sections with 20 to 80% cover of native vegetation, accounted for 49% of the roadside. Whilst the remaining 26.8% had less than 20% native vegetation and, therefore, low *Extent of Native Vegetation* value (Table 2, Figure 4).



**Figure 4: Extent of Native Vegetation**

The *Number of Native Species* score provides a measure of the diversity of the vegetation. Survey sections with more than 20 plant species spanned 25.5% of the roadside. Roadside sections with 6 and 19 plant species accounted for 44.1% of the roadside. The remaining 30.4% of roadside had less than 6 plant species and, therefore, nil contribution to the conservation value scores (Table 2, Figure 5).



**Figure 5: Number of Native Species**

24.2% of the roadside surveyed was only lightly affected by weeds. Medium level weed infestation occurred on 49% of the roadside. Whilst 26.8% of the roadside was heavily affected by weeds (Table 2, Figure 6).

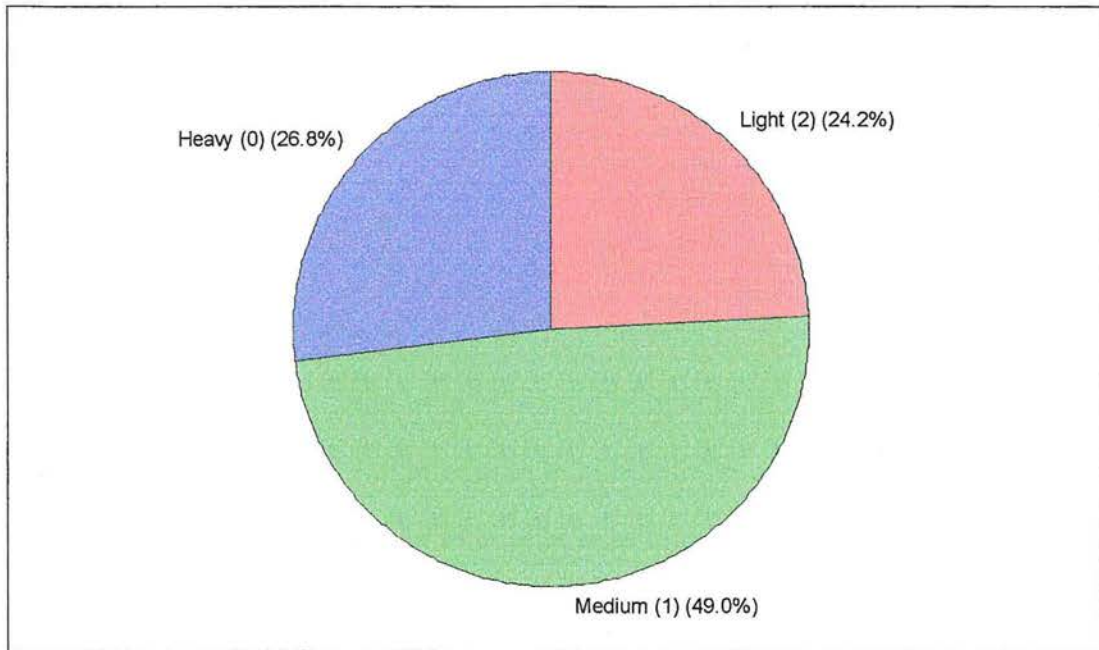


Figure 6: Weed Infestation. Light infestation = weeds less than 20% of ground layer. Medium infestation = weeds 20 to 80% of the ground layer. Heavy infestation = weeds more than 80% of the ground layer.

The *Value as a Biological Corridor* score is largely dependent upon the diversity of habitat and whether the corridor connects areas of uncleared land. High value biological corridor (as determined by the roadside surveyors) was present along 52.4% of the roadside, medium value along 32.1% of the roadside and low value corridor 15.5% (Table 2, Figure 7).

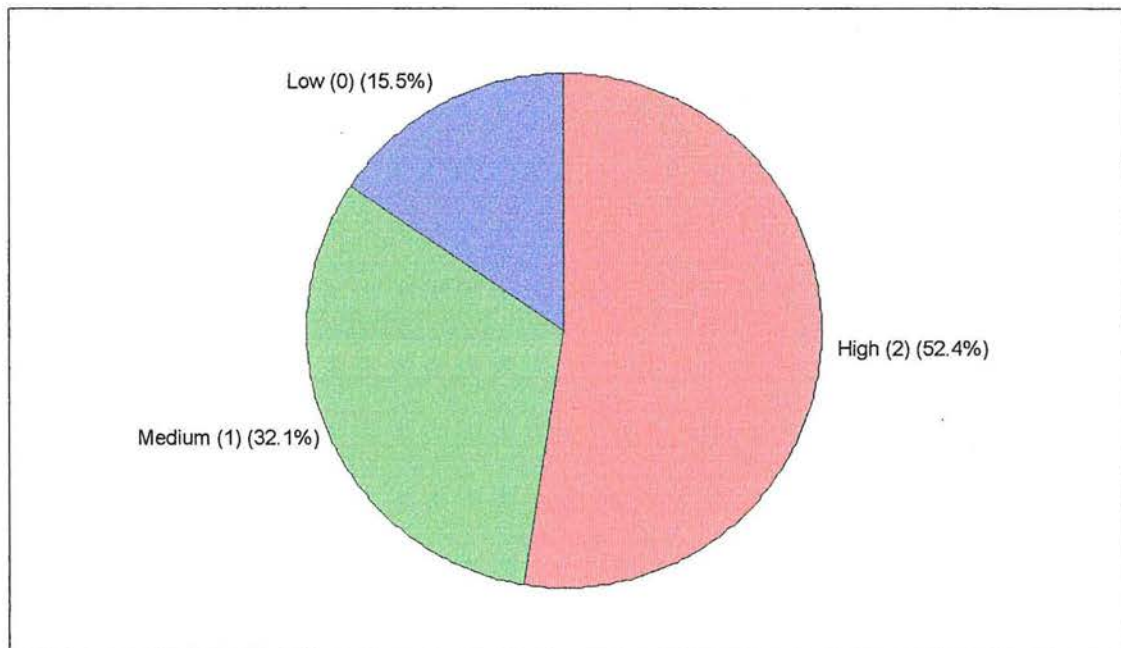


Figure 7: Value as Biological Corridor.

Most land adjoining the roadsides had at least some natural vegetation remaining. A scattered distribution of native vegetation was present on the land adjoining 79.9% of the roadside, whilst 8% of roadside was adjoined by land that had not been cleared. 10.4% of the roadside surveyed was adjoined by land that had been totally cleared of

its native vegetation. Plantations of non-native trees, railway reserve, drain reserve or urban development adjoined the remaining 1.8% of roadside (Table 2, Figure 8).

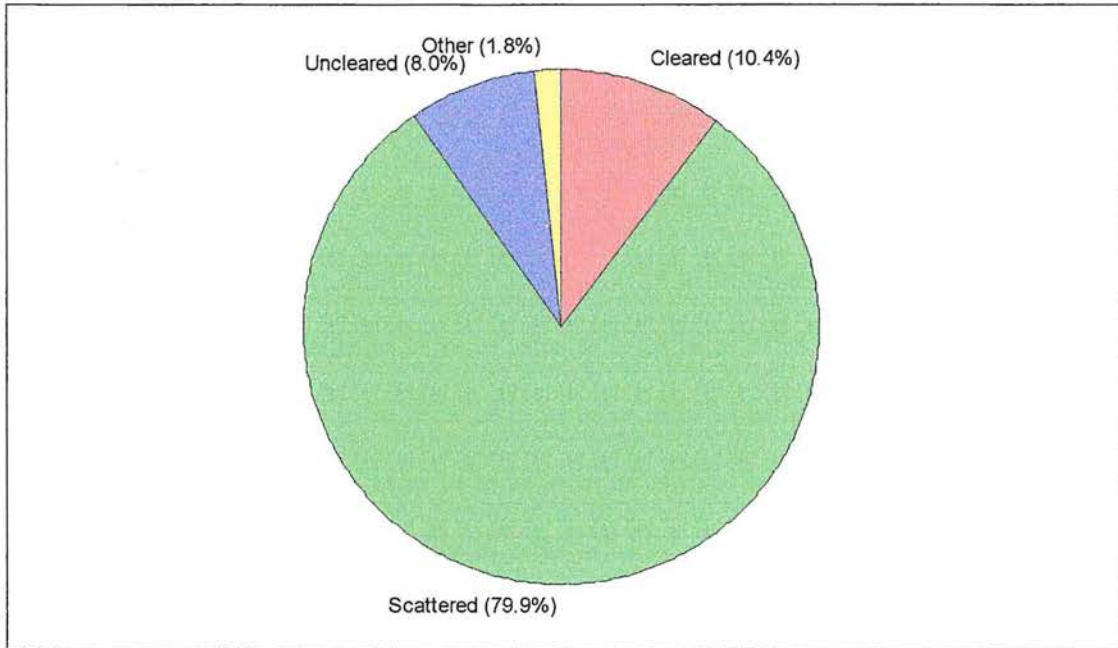


Figure 8: Adjoining Land Use.

#### Management Techniques

The following section provides management recommendations that will assist in retaining and enhancing roadside conservation value. These guidelines are taken from the Roadside Conservation Committee's Roadside Manual and or the Roadside Handbook. The Executive Officer of the Roadside Conservation Committee is also available to assist on all roadside conservation matters and can be contacted on (08) 9334 0423. The primary aim of road management is the creation and maintenance of a safe, efficient road system. However, the following management procedures should be adopted.

#### HIGH CONSERVATION VALUE ROADSIDES

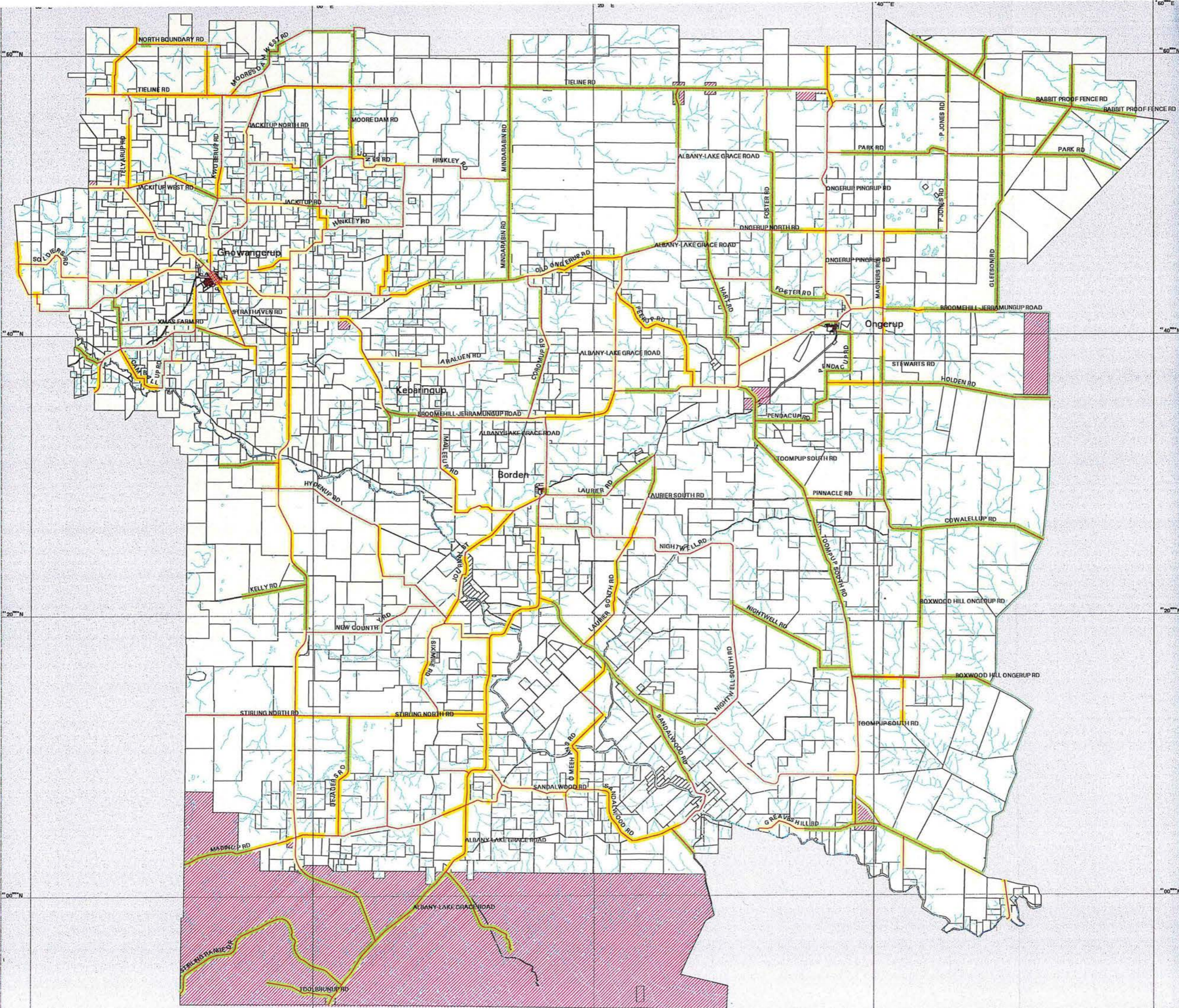
Management Goal  **Maintain and enhance the native plant communities.**

Management Guidelines  **Minimal disturbance to existing vegetation.**

because disturbance leads to weed invasion, which downgrades the conservation value, and increases the fire threat.

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;
- observing dieback control measures as required;



**SOURCE OF DATA**  
 Road Data: 1999  
 Topographic Data: 1999  
 Aerial Photography: 1999  
 CALM: 1999  
 WATERS: 1999

**CALM**  
 Conservation and Land Management

Roadside Conservation Committee  
 Produced by Main Roads, Road Data Branch  
 in co-operation with Roadside Conservation Committee.

- LEGEND**
- Low (0-4)
  - Medium Low (5-6)
  - Medium High (7-9)
  - High (9-12)
  - Reserve Width of 60m
  - Reserve Width of 40m
  - Reserve Width of 20m
  - No Reserve Information
  - CALM Estates

# SHIRE OF GNOWANGERUP

## Roadside Conservation Value



August 1999





Scale  
 Kilometers  
 DATUM: AMG ZONE 50

- apply the Fire Threat Assessment (Roadside Manual chapter 9) before burning roadside vegetation;
- use methods other than fuel reduction burns to reduce fire threat; if roadside burning must be undertaken, incorporate it into a district fire management program;
- encourage adjacent landholders to set back fences to allow roadside vegetation to proliferate;
- encourage adjacent landholders to plant windbreaks or farm tree lots adjacent to roadside vegetation to create a denser wind or shelterbelt;
- encourage revegetation projects by adjacent landholders.

### Medium Conservation Value Roadsides

Management Goal		Maintain native vegetation wherever possible, and to encourage its regeneration.
Management Guidelines		Minimise disturbance to existing vegetation.  With the information available on weed infestation on roadsides within the Shire of Gnowangerup, consideration could be given to strategic roadside weed control programs.

### Low Conservation Value Roadsides

Management Goal		Retain remnant trees and shrubs and encourage their regeneration. Encourage revegetation projects using indigenous plants.
Management Guidelines		Minimise soil disturbance to reduce weed invasion.  Encourage revegetation projects by adjacent landholders.

A draft Code of Practice is included in Appendix 4. This document is provided as the basis for developing a Shire of Gnowangerup Code of Practice for roadside conservation and Roadside Management Plans. Development of these documents will provide defined parameters for all roadside management works and also provide the local community with an overview of management practices that will ensure the sustainability of native roadside vegetation.

### Tree Roads

Tree roads are defined as those roadsides with a sufficient density of mature trees to create an attractive tunnel effect. Besides the aesthetic benefits, these areas also provide valuable habitat for birds and other arboreal fauna. Since mature trees are slow growing and hard to replace, care should be taken to conserve these avenues wherever possible. The points following should be considered when working on Tree Roads:

- prune offending branches rather than remove the whole tree;
- cut branches off close to limb or tree trunk;
- divert line of table drain to avoid disturbing tree roots;
- import fill to build up formation, rather than using side-borrow from roadside;
- when using herbicide for weed control on the roadside do not use a soil residual type, such as Siomazine or Atrazine. Eucalypts are especially sensitive to these;

- encourage the adjoining landholders to plant shelter belts on their property that will complement the roadside vegetation.

### **Flora Roads and Roads Important for Conservation**

Flora Roads are significant sections of road having a special conservation value due to the vegetation growing on the road reserve. Signs are available to mark these roads as Flora Roads. This has a twofold effect of drawing the attention of tourist to the high conservation roadside and it also alerts all that work in the roadside environment that the marked section of roadside requires due care to protect the values present

In order to plan roadworks so that important areas of roadside vegetation are not disturbed, road managers should know of these areas. It is suggested that the Shire Engineer or Environmental Officer establish a Register of Roads Important for Conservation. The following guidelines should be considered prior to establishing this registrar

- 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, i.e. trees, shrubs and groundcovers (herbs or native grasses). 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, may provide a source of local seed for revegetation projects and acts as a wildlife habitat for the protection of fauna.
- rare or endangered plants may occur on the roadside.
- it may provide nest sites and refuges for native animals. dense vegetation provides habitat for avifauna and invertebrates.

### **Special Environmental Areas**

A 'Special Environmental Area' is a section of roadside which has such significance that it requires special protection. Reasons for establishing 'Special Environmental Areas' can include:

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

'Special Environmental Areas' can be delineated by the use of site markers. See Figures 9 & 10 for design and placement of SEA markers. Workers who come across a 'Special Environmental Area' marker in the field should not disturb the area between the markers unless specifically instructed. If in doubt, the Supervisor, Shire Engineer or CEO should be contacted.

Western Power and Westrail also have systems for marking sites near power or rail lines. Examples of these are seen in the figure below.



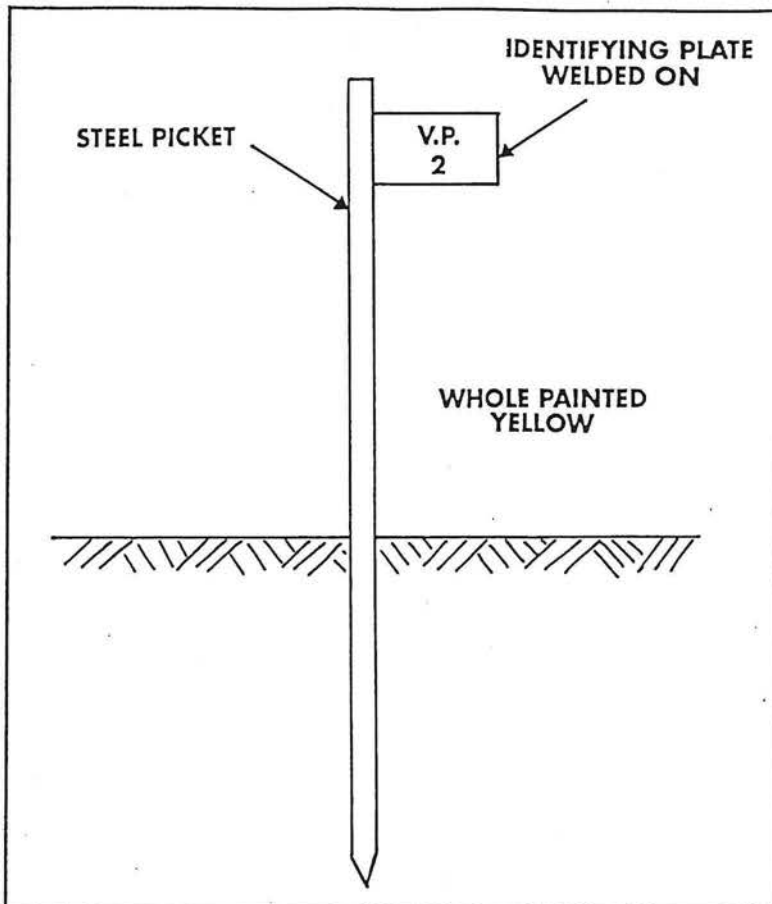


Figure 9. Shire Special Environmental Area site marker

### Special Environmental Area Register

To ensure that knowledge of rare flora and other sites does not get lost due, perhaps, to staff changes, a Local Authority should establish a Special Environmental Area Register. This should outline any special treatment, which the site should receive, and be consulted prior to any work in the area being initiated in the area.

The Special Environmental Area Register should be consulted by the appropriate person prior to starting work on any particular road, to ensure that inadvertent damage does not occur. All Special Environment Area sites should be marked on the Shire map, which records Roadside Conservation Value

Local Government is encouraged to permanently mark Special Environmental Areas to prevent inadvertent damage to the rare flora or other values being protected. Markers of a uniform shape and colour will make recognition easier for other authorities using road reserves.

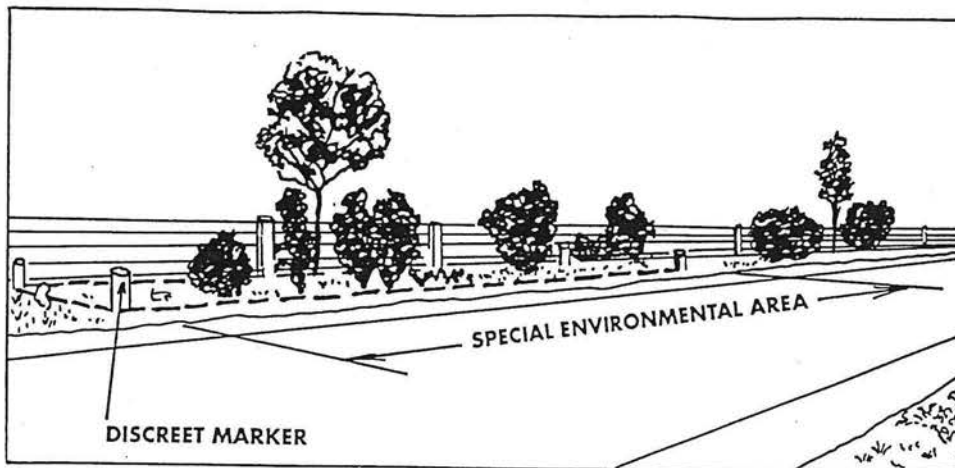


Figure 10. Marking sites in the field

When notified of a population needing marking, the Local Authority should contact the appropriate C.A.L.M. Regional or District office for assistance to ensure the exact site location and correct positioning of marker posts.

### Roadside Management Strategies

#### Planning

The RCC is able to provide good models of Roadside Management Plans and encourages all shires to adopt this practice of planning for roadside conservation. The following actions greatly enhance likelihood of a plan that changes behaviour and results in on-ground actions:

- ❖ **community support** encourage ongoing community involvement and commitment by establishing a local Roadside Advisory Committee or working group within the Shire Environmental Committee;
- ❖ **contract specifications** 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;
- ❖ **training** 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.

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.

The objective of all roadside management planning should be to:

- **protect**
  - native vegetation
  - rare or threatened flora or fauna
  - cultural and heritage values
  - community assets from fire
  
- **enhance**
  - indigenous vegetation communities
  - fauna habitats and corridors
  
- **maintain**
  - safe function of the road
  - natives 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

### **Strategies**

The development of a strategy enables potentially competing uses to coexist and ensures that roadsides have a coordinated approach to management. When producing regional strategies the RCC suggests that:

- organisational support from local government is essential from the outset;
- strategies should take no longer than 12 months to produce (including a period for community comment);
- communities need to be provided with background information to make formal decisions.

Management strategies should be produced to address local issues, rather than be to a standard format. Issues can be categorised as:

❖ **Functional**

- Firewood collection and timber harvesting
- Fire prevention
- Installation and maintenance of services
- Road construction and road widening
- Road maintenance
- Stockpile and dumpsite management
- Vegetation removal
- Vehicle and machinery activity
- Water Supply Catchments

❖ **Cultural and Recreational**

- Cultural and heritage values
- Horse riding
- Visual amenity and landscape values
- Wayside stops

❖ **Landcare**

- Apiculture
- Insect Pests
- Pest animals
- Ploughing, cultivating or grading
- Revegetation and site rehabilitation
- Weeds

❖ **Conservation**

- Protecting and conserving remnant native vegetation
- Rare, threatened or significant flora and fauna
- Regeneration of native plant communities
- Roadside marking of special environmental areas
- Unused road reserves
- Wetlands
- Wildlife habitat
- Wildlife corridors

### **Roadside Action Plans**

A Roadside Action Plan is prepared for an individual road and contains a works program that will enable conservation values and other road uses to be managed compatibly.

Roadside Action Plans are based on the guidelines that are produced as part of the roadside strategy.

The RCC suggests that Roadside Action Plans be:

- short term documents (to be reviewed within 2 years);
- prepared on a need basis;
- prepared after consultation with major stakeholders;
- a maximum of 2 pages per road;
- names a person or agency responsible for implementing the management recommendations.

## Weeds

WA Herbarium records indicate that a total of 110 species of weeds have been recorded from within the shire of Gnowangerup. However this should not be considered as a complete list as collectors often overlook weed as legitimate botanical specimens.

### List of exotic plants (weeds) recorded in the Shire of Gnowangerup

<i>Acetosella vulgaris</i>	sorrel, sheep's sorrel
<i>Amaranthus albus</i>	tumbleweed
<i>Asparagus asparagoides</i>	bridal creeper
<i>Avena barbata</i>	wild oats
<i>Bartsia trixago</i>	
<i>Bracteantha bracteata</i>	
<i>Briza maxima</i>	blowfly grass, quaking grass
<i>Briza minor</i>	shivery grass, lesser quaking grass
<i>Bromus diandrus</i>	brome grass, great brome
<i>Bromus hordeaceus</i>	soft brome grass
<i>Bromus rubens</i>	red brome grass
<i>Bupleurum lancifolium</i>	
<i>Cakile maritima</i>	sea rocket
<i>Carduus pycnocephalus</i>	slender thistle
<i>Carduus tenuiflorus</i>	sheep thistle
<i>Carthamus lanatus</i>	saffron thistle
<i>Centaurea melitensis</i>	maltese cockspur
<i>Centaurium erythraea</i>	common century
<i>Centaurium tenuiflorum</i>	slender century
<i>Cerastium glomeratum</i>	mouse-ear chickweed
<i>Chenopodium album</i>	fat hen
<i>Chenopodium murale</i>	green fat hen, nettle-leaved fat hen
<i>Chenopodium pumilio</i>	goosefoot
<i>Cirsium vulgare</i>	spear thistle
<i>Conyza albida</i>	tall fleabane
<i>Cotula bipinnata</i>	ferry cotula
<i>Cotula turbinata</i>	funnel weed
<i>Crassula decumbens</i>	
<i>Crassula natans</i>	
<i>Cyperus tenellus</i>	tiny flat-sedge
<i>Dittrichia viscosa</i>	
<i>Ehrharta calycina</i>	perennial veldt grass
<i>Ehrharta longiflora</i>	annual veldt grass
<i>Emex australis</i>	doublegee, spiny emex

<i>Epilobium ciliatum</i>	willowherb
<i>Erodium botrys</i>	corkscrews, long stoksbill
<i>Euphorbia peplus</i>	petty spurge
<i>Fumaria muralis</i>	wall fumitory
<i>Galium murale</i>	bedstraw
<i>Gamochoeta falcata</i>	cudweed
<i>Gynandris setifolia</i>	thread iris
<i>Hibiscus trionum</i>	bladder ketmia
<i>Homeria flaccida</i>	one leaf cape tulip
<i>Hordeum distichon</i>	barley grass
<i>Hordeum leporinum</i>	barley grass
<i>Hordeum marinum</i>	salt barley grass
<i>Juncus bufonius</i>	toad rush
<i>Juncus capitatus</i>	
<i>Juncus microcephalus</i>	
<i>Lactuca saligna</i>	wild lettuce
<i>Lamium amplexicaule</i>	deadnettle
<i>Lathyrus latifolius</i>	
<i>Lavatera arborea</i>	tree mallow
<i>Lepidium africanum</i>	common peppergrass
<i>Limonium sinuatum</i>	perennial statice
<i>Linum usitatissimum</i>	flax
<i>Lolium perenne</i>	perennial ryegrass
<i>Lolium temulentum</i>	darnel
<i>Lythrum hyssopifolia</i>	lesser loosestrife
<i>Medicago minima</i>	small burr medic
<i>Medicago scutellata</i>	snail medic
<i>Melilotus officinalis</i>	ribbed melilot
<i>Moluccella laevis</i>	molluca balm
<i>Monadenia bracteata</i>	South African orchid
<i>Monopsis debilis</i>	
<i>Ornithopus pinnatus</i>	slender serradella
<i>Orobanche minor</i>	lesser broomrape
<i>Osteospermum clandestinum</i>	stinking Roger
<i>Oxalis corniculata</i>	yellow wood sorrel, creeping oxalis
<i>Oxalis pes-caprae</i>	soursob
<i>Papaver hybridum</i>	rough poppy
<i>Parapholis incurva</i>	coast barbgrass
<i>Parentucellia latifolia</i>	red bartsia, common bartsia
<i>Pentaschistis airoides</i>	false hair grass

<i>Phalaris minor</i>	esser canary grass
<i>Phalaris paradoxa</i>	paradoxa grass
<i>Plantago coronopus</i> subsp. <i>Commutata</i>	buckshorn plantain
<i>Poa annua</i>	winter grass
<i>Polycarpon tetraphyllum</i>	fourleaf allseed
<i>Pseudognaphalium luteo-album</i>	Jersey cudmore
<i>Raphanus raphanistrum</i>	wild radish
<i>Romulea rosea</i>	Guildford grass
<i>Romulea rosea</i> var. <i>australis</i>	“ “
<i>Romulea rosea</i> var. <i>communis</i>	“ “
<i>Rostraria cristata</i>	cats tail
<i>Rumex brownii</i>	swamp dock
<i>Rumex crispus</i>	curled dock
<i>Sagina apetala</i>	common pearlwort
<i>Senecio diaschides</i>	ragwort
<i>Sisymbrium orientale</i>	
<i>Sonchus asper</i> subsp. <i>Glaucescens</i>	prickly sow thistle
<i>Sonchus oleraceus</i>	sow thistle
<i>Sorghum halepense</i>	Johnson grass
<i>Sorghum x alnum</i>	Columbus grass
<i>Spergularia rubra</i>	red sand spurrey
<i>Spergularia salina</i>	
<i>Sporobolus indicus</i> var. <i>capensis</i>	
<i>Trifolium angustifolium</i> var. <i>angustifolium</i>	narrowleaf clover
<i>Trifolium arvense</i> var. <i>arvense</i>	hare's foot clover
<i>Trifolium campestre</i> var. <i>campestre</i>	hop clover
<i>Trifolium dubium</i>	suckling clover
<i>Trifolium hirtum</i>	rose clover
<i>Trifolium repens</i> var. <i>repens</i>	white clover
<i>Trifolium subterraneum</i>	subterraneum clover
<i>Trifolium tomentosum</i> var. <i>tomentosum</i>	wooly clover
<i>Ursinia anthemoides</i>	ursinia
<i>Vellereophyton dealbatum</i>	white cudweed
<i>Vicia benghalensis</i>	purple vetch
<i>Vulpia bromoides</i>	squirrel's tail fescue
<i>Vulpia myuros</i>	silver grass, rat's tail fescue

## References

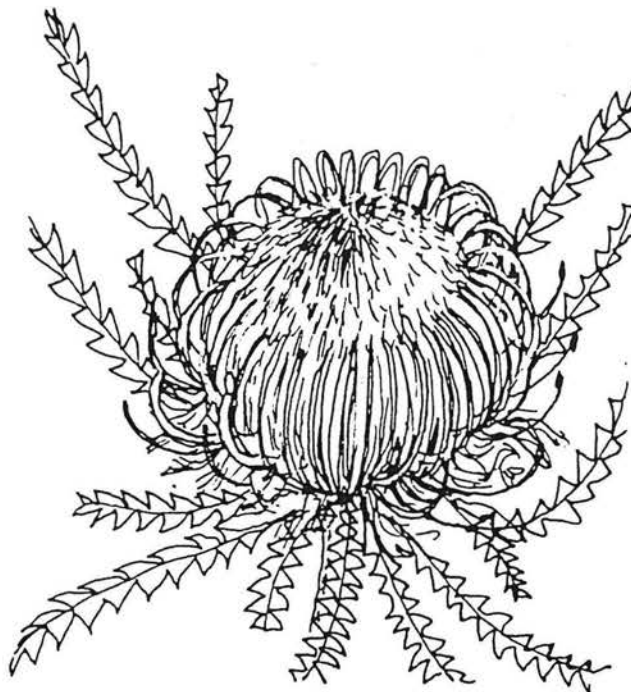
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# APPENDIX 1

Definitions of remnant vegetation types

**Definitions of remnant vegetation types, Beeston et al (1993).**

Vegetation classed as "**remnant vegetation**" has one or more of the following characteristics (Beeston et al., 1993):

- \* Most closely reflects the natural state of vegetation for a given area.
- \* Has an intact understorey (if forest or woodland).
- \* Has minimal disturbance by agents of human activity.

Vegetation classed as "**modified vegetation**" has one or more of the following characteristics:

- \* Degraded understorey (ie reduction in the number of native species, includes weeds).
- \* Obvious human disturbance-clearing, mining, grazing, weeds.
- \* Affected by salt.
- \* Narrow corridors of vegetation (usually along roads and railway lines or windbreaks), which are more likely to be affected by edge effects.

Vegetation classed as "**scattered vegetation**" has:

- \* No understorey
- \* Parkland cleared ie are scattered single trees.
- \* No significant signs or chance of regeneration.

## **APPENDIX 2**

Standard Survey Sheet

**SURVEY TO DETERMINE THE CONSERVATION VALUE OF A ROAD**

Roadside Conservation Committee



C. PO Box 104 COONGU WA 6157

(3)

Date: 11/12/96 Observer(s): B. Stwaer  
 Road Name: Mooses Drain Rd  
 Nearest named place: Growanup  
 Shire: Growanup Shire  
 Direction of travel: SW South (N)  
 Section no.: 9  
 starting point: Freegard Rd Junction  
 odometer reading: 1.6  
 ending point: Jackitup Rd  
 odometer reading: 4.9  
 length of section: 3.3

**WIDTH OF ROAD RESERVE**

Side of the road	Left	Right
Width of Vegetated roadside		
1-5m	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5-20m	<input type="checkbox"/>	<input type="checkbox"/>
over 20m	<input type="checkbox"/>	<input type="checkbox"/>

**NATIVE VEGETATION ON ROADSIDE**

tree layer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
shrub layer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ground layer	<input type="checkbox"/>	<input type="checkbox"/>

**RARE FLORA**

Rare flora known to be present    
 Name: \_\_\_\_\_

**EXTENT OF NATIVE VEGETATION ALONG LENGTH OF ROADSIDE**

Less than 20%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
20-80%	<input type="checkbox"/>	<input type="checkbox"/>
over 80%	<input type="checkbox"/>	<input type="checkbox"/>

**No. OF DIFFERENT NATIVE SPECIES**

0-5	<input type="checkbox"/>	<input type="checkbox"/>
6-19	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Over 20	<input type="checkbox"/>	<input type="checkbox"/>

Dominant species (if known): White gums

**WEEDS**

Few weeds (under 20% total plants)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Half weeds (20-80% total)	<input type="checkbox"/>	<input type="checkbox"/>
Mostly weeds (over 80% total)	<input type="checkbox"/>	<input type="checkbox"/>
Ground layer totally weeds	<input type="checkbox"/>	<input type="checkbox"/>

Dominant weeds (if known): Wet Grass Rye Grass

**VALUE AS A BIOLOGICAL CORRIDOR**

Connects uncleared areas	<input type="checkbox"/>	<input type="checkbox"/>
Flowering shrubs for nectar-feeding animals	<input type="checkbox"/>	<input type="checkbox"/>
Large trees with hollows for birds nests	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hollow logs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**FAUNA OBSERVED**

**PREDOMINANT ADJOINING LAND USE**

Agricultural crop or pasture:-		
• completely cleared	<input type="checkbox"/>	<input type="checkbox"/>
• scattered trees/shrubs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Uncleared land	<input type="checkbox"/>	<input type="checkbox"/>
Plantation of non-native trees	<input type="checkbox"/>	<input type="checkbox"/>
Urban or Industrial	<input type="checkbox"/>	<input type="checkbox"/>
Railway Reserve parallel to road	<input type="checkbox"/>	<input type="checkbox"/>
Drain Reserve parallel to road	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

**UTILITIES/DISTURBANCES**

Disturbances continuous	<input type="checkbox"/>	<input type="checkbox"/>
Disturbances isolated	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disturbances absent	<input type="checkbox"/>	<input type="checkbox"/>

Type: Gravel & Soil Dump

**CONSERVATION VALUE**

High	<input type="checkbox"/>	<input type="checkbox"/>
Medium	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>

Reasons: Tall Trees

**LANDSCAPE VALUE**

High	<input type="checkbox"/>	<input type="checkbox"/>
Medium	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Low	<input type="checkbox"/>	<input type="checkbox"/>

Avenue of trees    
 Reasons: Tall Trees

**GENERAL COMMENTS**

												L	R
												S	S



## **APPENDIX 3**

Raw data used to calculate the conservation values

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
AIRPORT RD	1	W	STRATHAVEN RD		2.9	9	2	2	1	2	0	2	2	2	0	1	0	U	U
AIRPORT RD	2	W		GNOWANGERUP TAMBELLUP RD	0.7	9	9	2	2	2	2	2	2	1	1	1	1	S	S
ALBANY-LAKE GRACE RD	1	N	SHIRE BOUNDARY		12.8	10	10	2	2	2	2	2	2	2	2	2	2	U	U
ALBANY-LAKE GRACE RD	2	N			1.0	6	4	2	1	2	1	0	0	0	0	2	2	U	U
ALBANY-LAKE GRACE RD	3	N		NIGHTWELL RD	27.5	5	5	2	2	0	0	0	0	0	0	2	2	S	S
ALBANY-LAKE GRACE RD	4	N	NIGHTWELL RD		1.5	10	8	2	2	2	2	2	2	2	1	2	1	U	U
ALBANY-LAKE GRACE RD	5	N			1.0	7	7	2	2	2	2	1	1	0	0	1	1	S	S
ALBANY-LAKE GRACE RD	6	N			0.4	9	9	2	2	2	2	1	1	2	2	2	2	U	U
ALBANY-LAKE GRACE RD	7	N			0.3	2	1	0	0	1	0	0	0	0	0	0	0	P	P
ALBANY-LAKE GRACE RD	8	N			4.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ALBANY-LAKE GRACE RD	9	N			2.5	3	3	1	1	0	0	0	0	0	0	0	0	C	C
ALBANY-LAKE GRACE RD	10	N			0.9	3	3	1	1	0	0	0	0	0	0	0	0	C	C
ALBANY-LAKE GRACE RD	11	N			1.8	4	4	1	1	0	0	0	0	0	0	1	1	C	C
ALBANY-LAKE GRACE RD	12	N			1.2	5	4	2	2	0	0	1	1	0	0	1	1	S	S
ALBANY-LAKE GRACE RD	13	N			3.6	4	4	1	1	0	0	0	0	0	0	1	1	C	C
ALBANY-LAKE GRACE RD	14	N			3.2	11	7	2	2	2	1	1	1	2	0	2	2	C	C
ALBANY-LAKE GRACE RD	15	N			1.0	2	8	0	2	0	1	0	0	0	1	0	2	C	C
ALBANY-LAKE GRACE RD	16	N			3.0	10	10	2	2	2	2	2	2	2	2	1	1	S	S
ALBANY-LAKE GRACE RD	17	N			3.2	8	8	2	2	1	1	1	1	1	1	1	1	C	C
ALBANY-LAKE GRACE RD	18	N			3.0	11	11	2	2	2	2	1	1	2	2	2	2	C	C
ALBANY-LAKE GRACE RD	19	N		TIELINE RD	1.3	10	10	2	2	2	2	2	2	2	2	2	2	U	U
ARALUEN RD	1	E	BROOMEHILL-JERRAMUNGUP RD		2.3	2	2	1	1	0	0	0	0	0	0	0	0	S	S
ARALUEN RD	2	E		GATES	5.6	7	3	2	1	1	0	1	1	1	0	1	1	S	S
ARALUEN RD	3	E			0.4	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ARALUEN RD	4	E			1.1	10	10	2	2	2	2	2	2	1	1	2	2	S	S
BLACK RD	1	N	BROOMEHILL-JERRAMUNGUP RD	HINKLEY RD	0.8	3	3	1	1	0	0	0	0	0	0	1	1	S	S
BLUFF KNOLL RD	1	S	CHESTER PASS RD	CAR PARK	8.0	10	10	2	2	2	2	2	2	2	2	2	2	U	U
BOXWOOD HILL ONGERUP RD	1	W	CRAKERUP RESERVE		3.6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	2	W			1.6	7	8	2	2	2	2	0	0	2	2	0	0	S	S
BOXWOOD HILL ONGERUP RD	3	N	OAKDALE & BOXWOOD RD		3.6	8	8	2	2	1	1	1	1	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	4	N			0.5	12	12	2	2	2	2	2	2	2	2	2	2	C	C
BOXWOOD HILL ONGERUP RD	5	N		FARMGATE KENT LOC 1338	1.5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	6	N	FARMGATE KENT LOC 1338		5.0	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	7	N	COWELLUP RD		2.0	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	8	N	GRAVEL PIT	PINNACLE RD	2.0	8	9	2	2	2	2	0	0	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	9	N	PINNACLE RD		1.9	10	10	2	2	2	2	1	1	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	10	N			1.1	5	6	1	1	1	2	0	0	1	1	1	1	S	S
BOXWOOD HILL ONGERUP RD	11	N			0.5	8	8	2	2	2	2	1	1	1	1	1	1	S	S
BOXWOOD HILL ONGERUP RD	12	N			2.3	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	13	N			1.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	14	N	HOLDEN RD	END OF ONG GOLF COURSE	4.1	5	5	1	1	1	1	0	0	1	1	1	1	S	S
BREMER BAY RD	1	SE	CHESTER PASS RD		1.0	6	6	1	1	1	1	0	0	1	1	1	1	C	C
BREMER BAY RD	2	SE			10.0	9	9	2	2	1	1	1	1	2	2	1	1	C	C
BREMER BAY RD	3	SE			4.2	9	9	2	2	2	2	1	1	1	1	1	1	C	C
BREMER BAY RD	4	SE			11.3	7	8	1	2	1	1	1	1	1	1	1	1	C	C
BREMER BAY RD	5	SE			1.5	4	4	0	0	2	2	0	0	0	0	0	0	C	C
BREMER BAY RD	6	SE			1.6	8	5	0	0	1	2	2	2	2	1	2	1	S	S
BREMER BAY RD	7	SE			2.6	11	8	2	0	2	2	2	2	2	2	2	2	S	S
BREMER BAY RD	8	SE			6.0	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BREMER BAY RD	9	SE		MONJEBUP RD	2.9	10	3	2	0	0	1	2	2	2	0	2	0	C	C
BRIDGEMAN RD	1	E	HART RD	FOSTERED RD	4.4	8	8	2	2	1	1	1	1	1	1	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	1	E	SHIRE BOUNDARY		0.6	9	3	2	1	2	0	1	1	2	0	2	1	U	U
BROOMEHILL-JERRAMUNGUP RD	2	E			1.7	3	3	1	1	0	0	0	0	0	0	1	1	P	P
BROOMEHILL-JERRAMUNGUP RD	3	E			1.8	4	3	1	1	0	0	0	0	0	0	2	1	S	S

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
BROOMEHILL-JERRAMUNGUP RD	4	E			6.2	4	4	1	1	0	0	0	0	0	0	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	5	E		STUTLEY ST	0.5	9	2	2	1	2	0	1	1	1	0	2	0	S	S
BROOMEHILL-JERRAMUNGUP RD	6	E	STUTLEY ST		0.5	3	3	1	1	1	1	0	0	0	0	0	0	S	S
BROOMEHILL-JERRAMUNGUP RD	7	E			1.1	3	3	0	0	2	2	0	0	0	0	0	0	I	I
BROOMEHILL-JERRAMUNGUP RD	8	E			1.0	5	5	1	1	2	2	0	0	0	0	1	1	P	P
BROOMEHILL-JERRAMUNGUP RD	9	E			0.3	5	2	1	1	2	0	0	0	0	0	1	0	I	I
BROOMEHILL-JERRAMUNGUP RD	10	E			0.3	3	2	1	1	0	0	0	0	0	0	1	0	S	S
BROOMEHILL-JERRAMUNGUP RD	11	E			4.7	4	4	2	2	0	0	0	0	0	0	1	1	S	S
BROOMEHILL-JERRAMUNGUP RD	12	E			4.1	8	3	2	2	1	0	1	1	1	0	2	0	S	S
BROOMEHILL-JERRAMUNGUP RD	13	E			1.0	5	6	2	2	1	1	0	0	0	0	1	2	S	S
BROOMEHILL-JERRAMUNGUP RD	14	E			0.7	2	8	1	2	1	2	0	0	0	2	0	1	U	U
BROOMEHILL-JERRAMUNGUP RD	15	E			5.4	7	6	2	2	1	1	1	1	0	0	2	1	S	S
BROOMEHILL-JERRAMUNGUP RD	16	E		SHEPHERDSON RD	0.8	8	1	2	0	1	0	1	1	1	0	2	0	S	S
BROOMEHILL-JERRAMUNGUP RD	17	E	SHEPHERDSON RD		1.6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	18	E			0.7	10	11	2	2	2	2	2	2	2	2	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	19	E			1.2	2	7	0	1	0	0	0	0	0	2	1	2	S	S
BROOMEHILL-JERRAMUNGUP RD	20	E			0.3	4	10	1	2	1	2	1	1	0	2	1	2	U	U
BROOMEHILL-JERRAMUNGUP RD	21	E			0.4	3	9	1	2	0	1	0	0	0	2	1	2	S	S
BROOMEHILL-JERRAMUNGUP RD	22	E		ALBANY-LAKE GRACE RD	7.4	2	2	1	1	0	0	0	0	0	0	0	0	S	S
BROOMEHILL-JERRAMUNGUP RD	23	E	M1 TURNOFF TO BORDEN	M1 TURNOFF	5.9	5	5	2	2	1	1	0	0	0	0	1	1	S	S
BROOMEHILL-JERRAMUNGUP RD	24	E	ALBANY-LAKE GRACE	CREEK	0.8	4	3	1	1	0	0	0	0	0	0	1	0	C	C
BROOMEHILL-JERRAMUNGUP RD	25	E	CREEK		3.5	9	9	2	2	1	1	1	1	1	1	2	2	C	C
BROOMEHILL-JERRAMUNGUP RD	26	E			0.6	9	8	2	2	1	1	2	2	1	1	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	27	E			9.9	4	3	1	1	0	0	0	0	0	0	2	1	S	S
BROOMEHILL-JERRAMUNGUP RD	28	E		RUBBISH DUMP SIGN	1.5	7	7	2	2	1	1	1	1	0	0	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	29	E	RUBBISH DUMP SIGN		1.9	8	11	2	2	1	2	1	1	1	2	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	30	E			0.7	7	7	2	2	1	1	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	31	E	ONGERUP TOWN	ONGERUP PINGRUP RD	0.5	7	7	2	2	1	1	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	32	E	ONGERUP PINGRUP RD	MAGNERS RD	2.3	4	3	1	1	0	0	0	0	0	0	1	0	C	C
BROOMEHILL-JERRAMUNGUP RD	33	E	MAGNERS RD		0.3	8	8	2	2	2	2	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	34	E			1.9	9	9	2	2	2	2	1	1	1	1	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	35	E			0.8	6	6	2	2	1	1	1	1	1	1	1	1	U	U
BROOMEHILL-JERRAMUNGUP RD	36	E			1.5	10	10	2	2	2	2	1	1	1	1	2	2	C	C
BROOMEHILL-JERRAMUNGUP RD	37	E			0.5	10	12	2	2	2	2	1	1	1	2	2	2	C	C
BROOMEHILL-JERRAMUNGUP RD	38	E		GLEESON RD	3.2	9	10	2	2	1	2	1	1	1	2	2	2	C	C
CAMBELLUP RD	1	S	WILLAMENUP RD		3.7	6	6	2	2	0	0	1	1	1	1	1	1	S	S
CAMBELLUP RD	2	S			0.9	6	6	2	2	0	0	1	1	1	1	1	1	S	S
CAMBELLUP RD	3	S			5.2	8	8	2	2	1	1	1	1	1	1	2	2	S	S
CHILLINUP RD	1	S	BORDEN-BREMER BAY RD		2.5	3	3	2	2	0	0	0	0	0	0	0	0	S	S
CHILLINUP RD	2	S			0.1	6	6	2	2	0	0	1	1	0	0	2	2	S	S
CLEAR HILLS RD	1	E			8.1	7	8	2	2	1	1	1	1	1	1	1	2	S	S
COROMUP RD	1	N	BROOMEHILL-JERRAMUNGUP RD		1.0	8	8	2	2	2	2	2	2	1	1	1	0	U	U
COROMUP RD	2	N			4.3	9	8	2	2	2	1	2	2	2	2	0	0	S	S
COROMUP RD	3	N			1.6	4	4	1	1	1	1	1	1	0	0	0	0	S	S
COROMUP RD	4	N			2.8	9	7	2	2	2	1	2	2	2	1	0	0	S	S
COROMUP RD	5	N			1.7	8	7	2	2	2	1	1	1	2	2	0	0	S	S
COWCHER RD	1	N	RABBIT PROOF FENCE RD		1.6	10	10	2	2	2	2	2	2	2	2	2	2	U	U
COWCHER RD	2	N		SHIRE BOUNDARY	0.8	11	10	2	2	2	2	2	2	2	2	2	2	S	S
COWELLUP RD	1	W	SHIRE BOUNDARY		3.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
COWELLUP RD	2	W			1.8	9	9	2	2	1	1	1	1	2	2	2	2	S	S
COWELLUP RD	3	W			3.4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
D STEWART RD	1	E	PALLINUP BOUNDARY RD		0.4	1	1	0	0	0	0	0	0	0	0	0	0	S	S
DAWSON RD	1	W	GNOWANGERUP - STIRLING RANGE RD NE CORNER OF LOT 4844		1.1	7	7	2	2	1	1	1	1	1	1	1	1	S	S
DAY RD	1	NE	DAY RD		1.6	9	10	2	2	1	2	1	1	2	2	2	2	S	S
DAY RD	2	NE			2.0	11	11	2	2	2	2	2	2	2	2	2	2	S	S
DAY RD	3	NE		RABBIT PROOF FENCE RD	0.4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
DEJAGERS RD	1	S	STIRLING ROAD NORTH		4.0	9	9	1	1	2	2	1	1	2	2	2	2	S	S





Road Name	Section Number	Direction of travel	Start Point		End Point		Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
			L	R	L	R		L	R	L	R	L	R	L	R	L	R	L	R	L	R
HINKLEY RD	6	E					1.1	8	10	2	2	1	2	1	1	1	1	2	2	S	S
HOBBS RD	1	N	MABINUP RD				1.9	7	7	1	1	1	1	1	1	1	1	2	2	S	S
HOBBS RD	2	N					1.8	4	4	1	1	0	0	0	0	0	0	2	2	S	S
HOLDEN RD	1	E	STEWART RD				1.5	10	10	2	2	2	2	1	1	2	2	2	2	S	S
HOLDEN RD	2	E					0.5	10	10	2	2	2	2	1	1	2	2	2	2	S	S
HOLDEN RD	3	E					7.5	10	10	2	2	2	2	2	2	2	2	1	1	S	S
HOLDEN RD	4	E			CORACKORUP RD		2.3	11	11	2	2	2	2	2	2	2	2	2	2	S	S
HYDENUP RD	1	E	GNOWANGERUP - STIRLING RANGE RD				2.8	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HYDENUP RD	2	SE					1.5	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HYDENUP RD	3	SE					2.3	7	8	2	2	1	1	1	1	1	1	1	2	S	S
HYDENUP RD	4	SE					1.8	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HYDENUP RD	5	SE					3.8	5	4	2	2	1	1	1	1	0	0	0	0	S	S
HYDENUP RD	6	SE					0.6	3	3	1	1	1	1	0	0	0	0	0	0	S	S
HYDENUP RD	7	SE					6.2	8	8	2	2	1	1	1	1	1	1	2	2	P	P
J SMITH RD	1	N	BORDEN-BREMER BAY RD				1.2	11	10	2	2	2	2	2	2	2	2	2	2	S	S
JACKITUP NORTH RD	1	N	JACKITUP WEST RD				0.3	8	6	2	1	2	1	1	1	1	0	2	2	U	U
JACKITUP NORTH RD	2	N					2.4	8	8	1	1	2	2	1	1	1	1	2	2	S	S
JACKITUP NORTH RD	3	N					1.3	7	7	2	2	1	1	1	1	1	1	1	1	S	S
JACKITUP NORTH RD	4	N					1.9	1	1	0	0	0	0	0	0	0	0	0	0	S	S
JACKITUP NORTH RD	4	N					0.3	7	7	2	2	2	2	1	1	1	1	1	1	U	U
JACKITUP NORTH RD	5	N			TIELINE RD		2.5	7	7	2	2	1	1	1	1	1	1	1	1	S	S
JACKITUP RD	1	E	KWOBERUP RD				2.5	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP RD	2	E					1.0	7	7	2	2	1	1	0	0	1	1	2	2	S	S
JACKITUP RD	3	E					5.3	4	3	2	1	1	1	0	0	0	0	0	0	S	S
JACKITUP RD	4	E					0.3	3	3	1	1	0	0	0	0	0	0	1	1	S	S
JACKITUP RD	5	E					0.9	9	9	2	2	2	2	2	2	1	1	1	1	S	S
JACKITUP RD	6	E					2.1	7	7	2	2	1	1	1	1	1	1	1	1	S	S
JACKITUP WEST RD	1	E	BROOMEHILL-JERRAMUNGUP RD				2.1	6	7	1	1	1	1	1	1	0	1	2	2	S	S
JACKITUP WEST RD	2	E					1.2	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP WEST RD	3	E					1.9	6	7	1	1	1	1	1	1	0	1	2	2	S	S
JACKITUP WEST RD	4	E			KWOBERUP RD		1.6	10	10	2	2	2	2	1	1	2	2	2	2	S	S
JACKITUP WEST RD	5	E	KWOBERUP RD				1.6	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP WEST RD	6	E			JACKITUP RD		1.6	8	8	2	2	2	2	1	1	1	0	2	2	U	U
JAM RD	1	N	OLD ONGERUP RD				2.8	6	6	2	2	1	1	1	1	1	1	0	0	S	S
JAMVALE RD	1	N	GREAVES HILL RD		BORDEN-BREMER BAY RD		1.6	6	9	2	2	1	1	1	1	0	2	1	2	S	S
JONES RD	1	W					0.7	8	6	2	2	2	1	1	1	1	1	1	0	S	S
JONES RD	2	W					3.1	1	1	0	0	0	0	0	0	0	0	0	0	S	S
JONES RD	3	W					1.0	8	5	2	1	1	1	1	1	1	0	2	2	S	S
KELLY RD	1	W	GNOWANGERUP - STIRLING RANGE RD				8.9	10	10	2	2	2	2	2	2	2	2	1	1	S	S
KWOBERUP RD	1	N					0.6	7	7	2	2	2	2	1	1	1	1	1	0	U	U
KWOBERUP RD	2	N					0.8	5	6	2	2	0	0	1	1	1	1	1	1	U	U
KWOBERUP RD	3	N					1.9	3	4	2	2	0	0	0	0	0	0	0	1	S	S
KWOBERUP RD	4	N					2.0	8	8	2	2	1	1	1	1	1	1	2	2	S	S
KWOBERUP RD	5	N					1.2	5	5	1	1	0	0	1	1	0	0	2	2	S	S
KWOBERUP RD	6	N					1.2	5	5	2	2	0	0	0	0	1	1	1	1	S	S
KWOBERUP RD	7	N					1.2	8	8	2	2	1	1	1	1	1	1	2	2	S	S
KWOBERUP RD	8	N					3.0	7	7	2	2	1	1	1	1	1	1	1	1	S	S
KYBELUP RD	1	W	GNOWANGERUP - STIRLING RANGE RD LOT 559				3.5	10	10	2	2	2	2	2	2	1	1	2	2	S	S
LAURIER RD	1	E	ALBANY LAKE GRACE RD				3.0	7	7	1	1	1	1	1	1	1	1	2	2	S	S
LAURIER RD	1	S	LAURIER RD				0.9	8	8	2	2	1	1	1	1	1	1	2	2	S	S
LAURIER RD	2	E					1.1	9	9	2	2	2	2	1	1	1	1	2	2	S	S
LAURIER RD	2	S					2.1	10	9	2	2	2	2	1	1	2	1	2	2	S	S
LAURIER RD	3	E					1.1	8	8	2	2	1	1	1	1	1	1	2	2	S	S
LAURIER RD	3	S					1.5	7	7	2	2	1	1	0	0	1	1	2	2	S	S
LAURIER RD	4	E					3.0	9	9	2	2	2	2	1	1	1	1	2	2	S	S
LAURIER RD	4	S					0.2	5	10	2	2	0	2	0	0	0	2	2	2	S	S
LAURIER RD	5	E			LAURIER SOUTH RD		0.8	9	9	2	2	2	2	1	1	1	1	2	2	S	S

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
LAURIER RD	5	S			0.6	3	10	2	2	0	2	0	0	0	2	0	2	S	S
LAURIER RD	6	S			0.4	4	7	2	2	1	2	0	0	0	2	0	0	S	S
LAURIER RD	7	S		NIGHTWELL RD	0.3	5	5	2	2	1	1	0	0	0	0	1	1	S	S
LAURIER RD	8	S	NIGHTWELL RD		1.5	6	6	2	2	1	1	0	0	0	0	2	2	S	S
LAURIER RD	9	S			1.3	1	1	0	0	0	0	0	0	0	0	0	0	S	S
LAURIER RD	10	S			1.4	9	6	2	2	2	1	1	1	2	0	2	2	U	U
LAURIER RD	11	S			2.6	6	6	2	2	1	1	0	0	0	0	2	2	S	S
LAURIER RD	12	S			0.8	1	1	0	0	0	0	0	0	0	0	0	0	S	S
LAURIER RD	13	S			0.1	3	3	1	1	0	0	0	0	0	0	1	1	S	S
LAURIER RD	14	S		BORDEN RD	2.5	5	4	1	1	1	1	0	0	0	0	2	2	S	S
MABINUP RD	1	E	WESTERN SHIRE BOUNDARY	START OF STIRLING RANGE NATIONAL	5.4	10	10	2	2	2	2	2	2	2	2	2	2	U	U
MABINUP RD	2	E	START OF STIRLING RANGE NATIONAL		2.0	6	8	1	2	1	1	1	1	1	1	1	2	S	S
MABINUP RD	3	E			0.7	4	6	1	1	1	1	0	0	0	1	1	2	S	S
MABINUP RD	4	E			2.1	5	5	1	1	1	1	0	0	0	0	2	2	S	S
MABINUP RD	5	E			1.0	6	6	1	1	1	1	1	1	1	1	1	1	S	S
MABINUP RD	6	E			9.4	7	7	2	2	1	1	0	0	1	1	2	2	S	S
MABINUP RD	7	E			1.9	6	6	1	1	1	1	0	0	1	1	2	2	S	S
MAGITUP RD	1	W	ALBANY - LAKE GRACE RD		1.5	4	4	2	2	0	0	1	1	0	0	0	0	S	S
MAGITUP RD	2	W			0.4	1	4	0	2	0	0	0	0	0	0	0	0	S	S
MAGITUP RD	3	N			1.0	3	3	2	2	0	0	0	0	0	0	0	0	S	S
MAGITUP RD	4	N			1.3	4	4	2	2	0	0	1	1	0	0	0	0	S	S
MAGITUP RD	5	N			1.8	5	5	2	2	0	0	1	1	1	1	0	0	S	S
MAGITUP RD	6	N			1.8	2	2	1	1	0	0	0	0	0	0	0	0	S	S
MAGITUP RD	7	N	APPROACH TO FLOODWAY		1.4	5	5	1	1	0	0	2	2	1	1	0	0	S	S
MAGITUP RD	8	N			0.5	8	8	2	2	2	2	2	2	1	1	0	0	S	S
MAGITUP RD	9	N		MAILEEUP RD	4.1	6	6	2	2	1	1	1	1	1	1	0	0	S	S
MAGITUP RD	10	N	MAILEEUP RD		2.1	6	7	2	2	1	1	1	1	1	1	0	1	S	S
MAGNERS RD	1	S	ONGERUP NORTH RD		4.1	8	3	2	1	2	0	1	1	1	1	1	0	S	S
MAGNERS RD	2	S			1.7	5	5	1	1	1	1	0	0	1	1	1	1	S	S
MAILEEUP RD	1	W	MAGITUP RD		1.7	3	3	1	1	0	0	1	1	0	0	0	0	S	S
MAILEEUP RD	2	W			1.1	5	5	2	2	0	0	1	1	0	0	1	1	S	S
MAILEEUP RD	3	W			0.8	4	4	2	2	0	0	1	1	0	0	0	0	S	S
MAILEEUP RD	4	W			1.4	3	5	2	2	0	0	0	0	0	1	0	0	S	S
MAILEEUP RD	5	W			2.4	4	6	2	2	0	0	1	1	0	1	0	0	S	S
MAILEEUP RD	6	W			1.5	8	5	2	2	2	0	2	2	1	1	0	0	S	S
MAILEEUP RD	7	W			3.9	8	8	2	2	1	1	1	1	1	1	2	2	S	S
MCDONALD RD	1	N	JACKITUP RD		0.6	6	7	1	1	2	2	2	2	0	0	1	1	U	U
MINDARABIN RD	1	N	OLD ONGERUP RD		8.2	10	11	2	2	2	2	2	2	2	2	1	2	S	S
MINDARABIN RD	2	N			5.7	10	10	2	2	2	2	2	2	2	2	1	1	S	S
MINDARABIN RD	3	N		SHIRE BOUNDARY	3.0	9	9	2	2	2	2	2	2	2	2	0	0	S	S
MOORE DAM WEST RD	1	NE	TIELINE RD		0.5	5	5	1	2	0	0	1	1	0	0	2	2	S	S
MOORE DAM WEST RD	2	NE			0.7	8	8	2	2	1	1	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	3	NE			1.7	7	7	2	2	0	0	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	4	NE			1.1	9	8	2	2	1	1	2	2	1	1	2	2	S	S
MOORE DAM WEST RD	5	NE			1.0	9	9	2	2	2	2	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	6	NE			1.1	9	9	2	2	1	1	2	2	1	1	2	2	S	S
MOORE DAM WEST RD	7	NE			2.0	8	8	2	2	1	1	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	8	NE			2.7	8	9	2	2	1	2	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	9	NE			1.2	8	9	2	2	2	2	1	1	1	1	2	2	U	U
MOORES DAM RD	1	N	JACKITUP RD		3.3	8	8	2	2	2	2	0	0	1	1	2	2	S	S
MOORES DAM RD	2	N			1.8	8	8	2	2	2	2	1	1	1	1	1	1	S	S
MOORES DAM RD	3	N			1.0	9	9	2	2	2	2	1	1	1	1	2	2	S	S
MOORES DAM RD	4	N			1.3	6	6	1	1	1	1	1	1	1	1	1	1	S	S
MOORES DAM RD	5	N			1.4	9	9	2	2	2	2	2	2	1	1	1	1	S	S
MOORES DAM RD	6	N			1.6	6	6	1	1	2	2	1	1	0	0	1	1	S	S
MOORES DAM RD	7	N			1.3	9	9	2	2	2	2	2	2	1	1	1	1	S	S
MOORES DAM RD	8	N			2.4	8	9	2	2	2	2	2	2	1	1	1	1	U	U

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
MOORES DAM RD	9	N			0.5	9	9	2	2	2	2	2	2	1	1	2	2	U	U
MUNGUP SOUTH RD	1	SW	BORDEN BREMER BAY RD	O MEEHANS RD	3.0	6	6	1	1	1	1	0	0	1	1	1	1	C	C
NEW COUNTRY RD	1	E	GNOWANGERUP - STIRLING RANGE RD		7.9	7	7	2	2	1	1	1	1	0	0	2	2	S	S
NEW COUNTRY RD	2	E		HYDENUP RD	2.6	7	7	2	2	1	1	1	1	0	0	2	2	S	S
NIGHTWELL RD	1	N	TOOMPUP SOUTH RD	NIGHTWELL RD	10.6	9	9	2	2	2	2	1	1	1	1	2	2	S	S
NIGHTWELL RD	2	N	NIGHTWELL RD		5.0	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NIGHTWELL RD	3	N			5.7	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NIGHTWELL RD	4	N		ALBANY-LAKE GRACE RD	8.3	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NORTH BOUNDARY RD	1	W	GNOWANGERUP RD		0.4	8	8	2	2	1	1	2	2	1	1	2	1	U	U
NORTH BOUNDARY RD	2	W			4.2	7	6	2	2	0	0	1	1	1	1	2	1	S	S
NORTH BOUNDARY RD	3	W			0.6	11	10	2	2	2	1	2	2	2	2	2	2	S	S
NORTH BOUNDARY RD	4	W		TELYARUP NORTH RD	0.3	8	8	2	2	2	2	1	1	1	1	2	2	U	U
O MEEHAN RD	1	S			9.3	7	7	1	1	2	2	0	0	1	1	1	1	C	C
O MEEHAN RD	2	S			6.5	6	6	2	2	0	0	0	0	1	1	1	1	C	C
OAKDALE RD	1	E	TOOMUP SOUTH RD		2.4	9	10	2	2	2	2	2	2	2	2	1	0	U	U
OAKDALE RD	2	E			0.7	6	5	1	1	0	0	0	0	1	2	2	2	C	C
OAKDALE RD	3	E			0.3	4	5	2	2	1	1	0	0	0	0	0	1	S	S
OAKDALE RD	4	E		BOXHILL ONGERUP RD	1.1	9	7	2	2	2	0	2	2	1	1	1	1	S	S
OLD ONGERUP RD	1	E	BROOMEHILL-JERRAMUNGUP RD		2.9	7	7	2	2	1	1	1	1	1	1	1	1	S	S
OLD ONGERUP RD	2	E			5.1	8	8	2	2	1	1	1	1	1	1	2	2	S	S
OLD ONGERUP RD	3	E			3.1	6	6	2	2	1	1	1	1	1	1	0	0	S	S
OLD ONGERUP RD	4	E			2.5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
OLD ONGERUP RD	5	E			3.2	9	9	2	2	2	2	1	1	2	1	1	2	S	S
OLD ONGERUP RD	6	E			1.5	9	9	2	2	2	2	2	2	2	2	0	0	S	S
OLD ONGERUP RD	7	E			2.6	1	1	0	0	0	0	0	0	0	0	0	0	S	S
OLD ONGERUP RD	8	E		LAKE GRACE RD	5.1	5	5	1	1	1	1	1	1	0	0	1	1	S	S
ONGERUP NORTH RD	1	E	ALBANY - LAKE GRACE RD		1.1	1	1	0	0	0	0	0	0	0	0	0	0	S	S
ONGERUP NORTH RD	2	E	ONGERUP ROCKS RESERVE		1.6	3	2	1	1	0	0	0	0	0	0	1	1	S	S
ONGERUP NORTH RD	3	E	PLEASANT PASTURES GATE		4.3	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ONGERUP NORTH RD	4	E			0.4	4	4	2	2	0	0	1	1	0	0	0	0	S	S
ONGERUP NORTH RD	5	E			0.7	10	9	2	2	2	2	2	2	1	1	2	2	S	S
ONGERUP NORTH RD	6	E			0.9	9	9	2	2	2	2	1	1	1	1	2	2	S	S
ONGERUP NORTH RD	7	E			1.8	6	6	2	2	0	0	1	1	0	0	2	2	S	S
ONGERUP NORTH RD	8	E	ONGERUP - PINGRUP RD		1.8	2	4	0	1	0	0	0	0	0	0	1	1	S	S
ONGERUP NORTH RD	9	E			2.3	2	2	1	1	0	0	0	0	0	0	0	0	S	S
ONGERUP NORTH RD	10	E			2.2	5	5	2	2	0	0	1	1	0	0	1	1	S	S
ONGERUP-PINGRUP RD	1	N	BROOMEHILL-JERRAMUNGUP RD	ONGERUP NORTH RD	7.0	4	4	1	1	2	2	0	0	0	0	0	0	S	S
ONGERUP-PINGRUP RD	2	N	ONGERUP NORTH RD	TIE LINE RD	10.0	7	7	2	2	2	2	1	1	1	1	0	0	S	S
ONGERUP-PINGRUP RD	3	N	TIE LINE RD	KENT SHIRE BOUNDARY	4.7	6	5	2	2	0	2	2	2	1	0	0	0	S	S
P JONES RD	1	S	RABBIT PROOF FENCE RD		1.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
P JONES RD	2	S			0.4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
P JONES RD	3	S		PARK RD	3.7	8	2	0	0	2	0	1	1	2	1	2	0	S	S
P JONES RD	4	S		PARK RD	3.7	8	9	2	2	1	1	1	1	1	2	2	2	S	S
P JONES RD	5	S	PARK RD		2.5	7	3	2	0	1	0	0	0	1	0	2	2	S	S
PALLINUP BOUNDARY RD	1	N	CLEAR HILLS RD	D STEWARTS RD	1.3	2	3	1	1	0	0	0	0	0	0	0	1	S	S
PALLINUP BOUNDARY RD	2	N	D STEWARTS RD		0.6	5	5	2	2	0	0	0	0	0	0	2	2	S	S
PALLINUP BOUNDARY RD	3	N		GILLESPIE RD	1.9	4	4	2	2	0	0	0	0	0	0	1	1	S	S
PALLINUP BOUNDARY RD	4	N	GILLESPIE RD		1.0	6	5	2	2	1	1	0	0	0	0	2	1	S	S
PALLINUP BOUNDARY RD	5	N			1.9	6	6	2	2	1	1	0	0	0	0	2	2	S	S
PALLINUP RD	1	NW	GNOWANGERUP-TAMBELLUP RD	SHITE BOUNDARY	2.2	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	1	W	SHIRE BOUNDARY		2.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	2	W			3.5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	3	W			2.5	3	8	1	2	1	2	0	0	0	1	0	1	S	S
PARK RD	4	W			3.9	11	8	2	2	2	1	2	2	2	1	2	2	S	S
PARK RD	5	W			7.6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	6	W		ONGERUP PINGRUP RD	1.0	8	1	2	0	1	0	1	1	1	0	2	0	S	S
PEERUP RD	1	SE	LAKE GRACE RD	BROOMEHILL-JERRAMUNGUP RD	11.1	6	6	1	1	0	0	1	1	1	1	2	2	S	S

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
PENDALUP RD	1	S	BOXHILL RD		1.3	9	9	2	2	2	2	2	2	1	1	1	1	S	S
PENDALUP RD	2	S			2.4	9	9	2	2	2	2	1	1	1	1	2	2	S	S
PENDALUP RD	3	S			5.5	9	9	2	2	2	2	1	1	1	1	2	2	S	S
PINNACLE	1	E	TOOMPUP SOUTH RD		1.7	3	11	1	2	0	2	0	0	0	2	0	2	C	C
PINNACLE	2	E			3.8	8	10	2	2	2	2	1	1	1	1	1	2	S	S
RABBIT PROOF FENCE RD	1	ESE	SHIRE BOUNDARY	FENCE ON LHS	5.9	10	11	2	2	2	2	2	2	2	2	2	2	U	U
RABBIT PROOF FENCE RD	2	ESE	FENCE ON LHS		0.6	7	10	2	2	2	2	1	1	0	1	1	2	S	S
RABBIT PROOF FENCE RD	3	ESE			1.1	4	11	1	2	0	2	0	0	1	2	1	2	S	S
RABBIT PROOF FENCE RD	4	ESE		GLEESON RD	0.3	6	11	2	2	1	2	0	0	1	2	1	2	S	S
RABBIT PROOF FENCE RD	5	ESE	GLEESON RD		5.0	11	11	2	2	2	2	2	2	2	2	2	2	S	S
RABBIT PROOF FENCE RD	6	ESE		SHIRE BOUNDARY	4.8	11	11	2	2	2	2	2	2	2	2	2	2	S	S
RICHARDSON RD	1	S	AIRPORT RD		0.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ROBERT WELLSTEAD	1	S	BREMER BAY RD		2.3	2	2	0	0	0	0	0	0	0	0	0	0	C	C
ROUT RD	1	W	ALBANY LAKE GRACE RD		0.3	8	6	2	2	1	1	1	1	1	0	2	1	S	S
ROUT RD	2	W			1.8	7	7	1	1	1	1	1	1	1	1	2	2	S	S
SANDALWOOD RD	1	E	AMELUP		10.1	4	4	2	2	0	0	0	0	0	0	1	1	S	S
SANDALWOOD RD	2	E			8.8	6	6	2	2	0	0	1	1	0	0	2	2	D	D
SANDALWOOD RD	3	E			4.8	8	8	2	2	1	1	1	1	1	1	1	1	C	C
SANDALWOOD RD	4	E			6.7	10	10	2	2	1	1	2	2	2	2	2	2	S	S
SCHMEDJE RD	1	S	OAKDALE RD		0.8	6	6	2	2	1	1	0	0	1	1	1	1	S	S
SCHMEDJE RD	2	S			1.6	2	1	1	0	0	0	0	0	0	0	0	0	S	S
SCHMEDJE RD	3	S		END OF ROAD	1.0	5	5	2	2	1	1	0	0	0	0	1	1	S	S
SHEPHERDSON RD	1	SE	NEAR BROOMEHILL-JERRAMUNGUP R		0.8	11	11	2	2	2	2	2	2	2	2	2	2	R	R
SHEPHERDSON RD	12	SE			1.1	8	9	2	2	1	2	1	1	1	1	2	2	S	S
SHILLINGS RD	1	W	BROOMEHILL-JERRAMUNGUP RD	ROAD CLOSED	0.3	4	4	1	1	1	1	0	0	0	0	1	1	S	S
SIX MILE RD	1	S	MAGITUP RD		1.8	3	3	1	1	0	0	0	0	0	0	1	1	S	S
SIX MILE RD	2	S			1.8	3	3	1	1	0	0	0	0	0	0	1	1	S	S
SIX MILE RD	3	S			2.0	6	6	2	2	1	1	0	0	0	0	2	2	S	S
SIX MILE RD	4	S			2.7	7	7	1	1	1	1	1	1	1	1	2	2	S	S
SMITH RD	1	E	ALBANY LAKE GRACE RD		1.8	4	4	1	1	1	1	0	0	0	0	1	1	S	S
SMITH RD	2	E			0.3	6	6	1	1	1	1	0	0	0	0	2	2	C	C
SMITH RD	3	E			1.6	4	4	1	1	1	1	0	0	0	0	1	1	S	S
SOLDIERS RD	1	W	GNOWANGERUP TOWN		1.2	1	1	0	0	0	0	0	0	0	0	0	0	S	S
SOLDIERS RD	2	W			2.4	1	1	0	0	0	0	0	0	0	0	0	0	S	S
SOLDIERS RD	3	W			0.4	8	8	2	2	1	1	1	1	1	1	2	2	S	S
SOLDIERS RD	4	W			1.5	6	6	1	1	1	1	1	1	0	0	2	2	S	S
SOLDIERS RD	5	W			8.4	3	3	0	0	0	0	0	0	0	0	2	2	S	S
SOLDIERS RD	6	W			0.3	8	8	2	2	1	1	1	1	1	1	2	2	S	S
SOLDIERS RD	7	W		MARTINUP	1.2	3	3	0	0	0	0	0	0	0	0	2	2	S	S
STEWARTS RD	1	S	BROOMEHILL-JERRAMUNGUP RD		0.3	5	7	1	2	1	0	1	1	1	2	0	2	S	S
STEWARTS RD	2	S			0.2	4	10	1	2	2	2	0	0	0	2	0	2	S	S
STEWARTS RD	3	S			0.2	3	3	1	1	1	1	0	0	0	0	0	0	S	S
STEWARTS RD	4	S		STEWARTS GATE	1.3	6	8	1	1	2	2	2	2	0	0	0	2	S	S
STEWARTS RD	5	S	STEWARTS GATE	GATEWAY	0.5	7	2	1	1	1	0	1	1	1	0	2	0	S	S
STEWARTS RD	6	S	GATEWAY		0.7	2	2	1	1	0	0	0	0	0	0	0	0	S	S
STEWARTS RD	7	S			0.5	5	1	1	0	1	0	1	1	0	0	1	0	S	S
STEWARTS RD	8	S			2.1	9	9	2	2	2	2	1	1	1	1	2	2	S	S
STIRLING NORTH RD	1	W	ALBANY - LAKE GRACE RD		7.7	6	6	2	2	0	0	1	1	0	0	2	2	S	S
STIRLING NORTH RD	2	W			9.2	6	7	2	2	0	1	1	1	1	1	1	1	S	S
STIRLING NORTH RD	3	W		EASTERN SHIRE BOUNDARY	6.8	7	7	2	2	1	1	1	1	1	1	1	1	S	S
STIRLING RANGE DR	1	W	CHESTER PASS RD		16.7	10	10	2	2	2	2	2	2	2	2	2	2	U	U
STRATHAVEN RD	1	SE	BROONEHILL-JERRAMUNGUP RD		7.2	8	6	2	2	1	1	1	1	1	1	2	0	S	S
STUTLEY RD	1	S	HINKLEY RD		2.3	5	5	1	1	1	1	0	0	0	0	2	2	S	S
TELYARUP RD	1	S	TIELINE RD		1.8	7	7	2	2	1	1	1	1	0	0	2	2	S	S
TELYARUP RD	2	S			0.5	1	1	0	0	0	0	0	0	0	0	0	0	S	S
TELYARUP RD	3	S		JACKITUP RD	5.8	5	5	0	0	1	1	1	1	0	0	2	2	S	S
TELYARUP RD	3	S		JACKITUP RD	4.5	5	5	0	0	1	1	1	1	0	0	2	2	S	S

Road Name	Section Number	Direction of travel	Start Point	End Point	Section Length	Cons. Value		Nat. Veg		Weeds		Extent. Veg		No. Sp.		Value. Corr		Land Use	
						L	R	L	R	L	R	L	R	L	R	L	R	L	R
TIELINE RD	1	W	ONGERUP PINGRUP RD	END OF NATURE RESERVE	2.5	8	9	2	2	2	2	2	2	1	1	1	1	U	U
TIELINE RD	2	W	END OF NATURE RESERVE	NATURE RESERVE	5.5	10	10	2	2	2	2	2	2	1	1	2	2	S	S
TIELINE RD	3	W	NATURE RESERVE	END OF NATURE RESERVE	1.0	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	4	W	END OF NATURE RESERVE	ALBANY - LAKE GRACE RD	1.5	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	5	W	ALBANY - LAKE GRACE RD	MINDARABIN RD	12.2	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	6	W	MINDARABIN RD	MOORES DAM RD	11.3	8	8	2	2	2	2	1	1	1	1	1	1	S	S
TIELINE RD	7	W	MOORES DAM RD	KWOBERUP RD	9.0	6	7	1	2	2	2	1	1	0	0	1	1	S	S
TIELINE RD	8	W	KWOBERUP RD	EASTWOOD RD	6.5	6	6	2	2	1	1	1	1	0	0	1	1	S	S
TIELINE RD	9	W	EASTWOOD RD		2.5	4	4	2	2	1	1	0	0	0	0	0	0	S	S
TOOLBRUNUP RD	1	W	CHESTER PASS RD		4.8	10	10	2	2	2	2	2	2	2	2	2	2	U	U
TOOMPUP SOUTH RD	1	S	BROOMEHILL-JERRAMINGUP RD		2.4	9	9	2	2	2	2	1	1	1	1	1	1	C	C
TOOMPUP SOUTH RD	2	S			2.2	9	9	2	2	2	2	1	1	1	1	1	1	C	C
TOOMPUP SOUTH RD	3	S			5.7	9	9	2	2	2	2	1	1	1	1	1	1	C	C
TOOMPUP SOUTH RD	4	S			2.8	10	10	2	2	2	2	1	1	2	2	1	1	C	C
TOOMPUP SOUTH RD	5	S			4.9	10	10	2	2	2	2	1	1	1	1	2	2	C	C
TOOMPUP SOUTH RD	6	S			5.0	10	8	2	2	2	2	1	1	2	1	1	1	C	C
TOOMPUP SOUTH RD	7	S			4.7	4	4	2	2	0	0	0	0	0	0	1	1	S	S
TOOMPUP SOUTH RD	8	S			0.4	4	8	1	2	2	0	0	0	0	2	0	2	S	S
TOOMPUP SOUTH RD	9	S			2.0	4	4	1	1	0	0	0	0	1	1	0	0	C	C
WHITE RD	1	N	CLEAR HILLS RD		5.2	8	8	2	2	1	1	1	1	1	1	2	2	S	S
WILLEMENUP RD	1	N	GNOWANGERUP-TAMBELLUP RD	CLEAR HILLS RD	4.0	9	9	2	2	1	1	2	2	1	1	2	2	S	S
WOODLAND RD	1	N	BROOMEHILL GERRAMUNGUP RD		2.7	4	3	1	1	1	1	0	0	0	0	1	0	S	S
XMAS FARM	1	E	WILLEMENUP RD	GNOWANGERUP-TAMBELLUP RD	5.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S

1152.1

NB: Direction of travel relates to direction of road according to MRWA's centreline capture.

## **APPENDIX 4**

Generic Code of Practice

**A GENERIC  
CODE OF PRACTICE  
FOR ROADSIDE CONSERVATION  
DURING ROAD CONSTRUCTION  
AND ROAD MAINTENANCE OPERATIONS  
BY LOCAL GOVERNMENT**



June 1999

The Roadside Conservation Committee

## **Introduction**

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### **Aims of the Code of Practice**

**To balance road design and road safety requirements with all other values associated with roadsides in the Shire.**

To achieve this it will be necessary to:

- ◆ Account for the needs of ratepayers, council work teams, and other organisations with responsibilities or interests in roads and roadsides;
- ◆ Develop cost effective roadworks and maintenance programs;
- ◆ Protect road reserves and the adjoining land from erosion, weeds and disease;
- ◆ Minimise disturbance and clearance of vegetation; and
- ◆ Use the Roadside Conservation Committee map of conservation values as a basis for planning/management decisions so as to identify potential conflict situation and ameliorate against them.

### **Benefits of a Code of Practice**

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- ◆ A fresh start on road and road reserve management which will allow for the competing demands and values of road reserves and do this within the context of the surrounding environment rather than in isolation from it.
- ◆ Improve communication, consultation and cooperation throughout the Shire staff at all levels so that environmental considerations are integral to any works program, rather than an additive to it.
- ◆ Set out clear responsibilities for roadside works between personnel within the Shire.
- ◆ The development of road works and road maintenance techniques which improve the overall environment of the roadway.
- ◆ Build on the skills and experience of works crews in environmental road management and maintenance.
- ◆ The development of works appropriate to the special values of particular roadsides, whether for safety, fire prevention, erosion or wildlife.



## **A Code of Practice is:**

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- ◆ A clear direction for on-ground staff.
- ◆ A clear understanding of the issues involved.
- ◆ Clear and strategic directions and management guidelines.
- ◆ A clear allocation of responsibilities.
- ◆ Flexible to adjust to changing circumstances.
- ◆ A participatory process between staff and the community.

## **Management Goals**

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- ◆ Protect indigenous flora and fauna values.
- ◆ Maintain and enhance visual amenity and landscape quality.
- ◆ Prevent further land degradation such as soil erosion.
- ◆ Prevent the invasion and spread of weeds and soil borne fungal pathogens.

## **Management Aims**

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- ◆ Ensure the safe function of the road and protect the road formation.
- ◆ Minimise the risk and impact of wildfire through weed control.
- ◆ Protect and restore indigenous vegetation communities on roadsides.
- ◆ Protect rare and priority species of flora and fauna on roadsides.
- ◆ Prevent further land degradation on roadsides.
- ◆ Control the spread of weed and fungal pathogens on roadsides.
- ◆ Maintain and enhance the visual amenity and landscape quality of the road reserve.
- ◆ Protect the cultural and heritage values of roadsides.
- ◆ Protect service utilities located on roadsides.

## **General Principles**

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- ◆ Areas beyond the road formation that contain vegetation (includes all trees, shrubs and groundcovers whether whole or in part, but excluding environmental and noxious weeds) to any degree of significance will not be disturbed during road construction and road maintenance operations, except where necessary to carry out required works.
- ◆ Weeds and soil borne fungal pathogens will not be spread as a result of road construction and road maintenance operations.

## **Contractor Agreement**

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- ◆ When road works are carried out under contract for the Shire, the Code of Practice for Roadside Conservation in Road Construction and Road Maintenance will be adhered to by the contractor for the duration of the contract.

## **Road Maintenance**

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- ◆ Works areas or zones should be marked out clearly before commencing works.
- ◆ The appropriate type and size of machine will be used for road operations as specified by the Shire Engineer or representative.
- ◆ On roadsides of high conservation value, machines will be selected that create the least disturbance to vegetation on the road reserve.
- ◆ On roadsides of high conservation value machinery will, where possible, operate from the road formation while carrying out works.
- ◆ Table drains will be maintained in a condition that will prevent water flooding the road. Works must be kept to the minimum to meet these requirements.
- ◆ When carrying out maintenance of table drains, spoil will be directed towards the road pavement, where it will be removed to a designated dump site as specified by the Shire Engineer or representative.
- ◆ Road shoulders will be graded to the minimum required to maintain the road formation and the condition of the road according to the type of road as specified by the Shire Engineer or representative. Under no circumstances is the road reserve to be graded beyond the road formation.
- ◆ Vegetation on the road reserve beyond the road formation should not be disturbed during grading operations.
- ◆ Scraping of batters should be avoided.
- ◆ Vehicles and machinery should not be serviced within roadside vegetation.
- ◆ Any soil or other materials required for road construction and maintenance operations should be taken from disease free and weed free areas.
- ◆ Where there is no alternative to use soil or other materials from a weed or disease infested sites for road construction or road maintenance operations, the materials should only be used on roads of low conservation value.
- ◆ Materials used for road construction or road maintenance operations on high conservation or moderate conservation roads should wherever safe be temporarily piled on the road formation or on an existing cleared area in close proximity to the work site.

- ◆ All excess materials from road construction or road maintenance operations will be removed at completion of works to a designated site of low conservation value as specified by the Shire Engineer or representative.
- ◆ Pits for gravel, soil or other materials will not be dug from the roadside.

### **Vegetation Removal**

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- ◆ When it is deemed necessary to remove, destroy or lop indigenous vegetation the Foreman of the work crew has a responsibility to ensure that no indigenous vegetation, other than that designated, is removed, destroyed or lopped and that indigenous vegetation beyond the working zone is not disturbed.
- ◆ Only the minimum vegetation necessary to meet required works should be marked for removal. If more vegetation needs to be removed to complete required works than originally marked, the Shire engineer or representative will be consulted prior to undertaking works.
- ◆ All other vegetation on the road reserve should not be disturbed.
- ◆ Areas of regenerating indigenous vegetation on high conservation roadsides should be clearly identified on the ground before mowing or slashing operations are undertaken.
- ◆ Areas of regenerating indigenous vegetation on medium and low conservation roadsides should be avoided during mowing or slashing operations.
- ◆ Dead trees should be retained on the roadside, unless they pose a significant hazard as specified by the Shire Engineer or representative, to provide habitat for wildlife.
- ◆ Limbs on dead trees that pose a significant hazard as specified by the Shire Engineer or representative will be removed. The rest of the tree should be retained on the road reserve to provide habitat for wildlife.
- ◆ Pruning works will be carried out so as to minimise the extent of wounding and enhance callus formation.
- ◆ Tree stumps left after pruning or vegetation removal works will be cut as close as possible to the ground.
- ◆ Vegetation to be removed should be felled in the direction that minimises damage to surrounding vegetation, preferably onto the road formation or other cleared area.
- ◆ Indigenous vegetation that must be removed will be chipped and either returned to the site, used in rehabilitation works or made available for community projects.
- ◆ Larger vegetation that can not be chipped will be stock piled in a cleared area for public removal or returned to the Shire Depot and made available at an appropriate time for firewood.

### **Vegetation Removal cont.**

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- ◆ All attempts to carry out sawing, splitting and chipping of felled vegetation should be done with due regard to the understorey. These activities should be restricted to as few sites as possible.
- ◆ Pruning required in the vicinity of powerlines should be carried out in accordance with Western Power's Code of Practice for tree clearing.

### **Site Rehabilitation**

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- ◆ In the event that major works are required that modify existing indigenous vegetation on road sides, rehabilitation of the site should be encouraged. To achieve this, it is recommended that the guidelines proposed by the Roadside Conservation Committee are adhered to.
- ◆ Seed from indigenous plants should be collected over a period of time to allow for seeds from a range of species to be collected, from the roadside prior to works commencing. N.B. CALM permit is required.
- ◆ Machinery should be chosen to ensure that vegetation to be chipped is free of top soil.
- ◆ Top soil should be removed prior to works commencing and stock piled in a cleared area, for a period no longer than six months, to be spread over the site at completion of works.
- ◆ Sub soil in the works area should be ripped at completion of works to avoid compaction, before top soil is spread over the site.
- ◆ Indigenous vegetation should be chipped and returned to the site at completion of works.

### **Weed and Pathogen Control**

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- ◆ The Shire will initiate training for outdoor staff to identify environmental and noxious weeds found in the district.
- ◆ Weed control methods that minimise disturbance to native vegetation will be implemented. Refer to Chapter 10 of the Roadside Conservation Committee Manual.
- ◆ A reporting method to record the location and spread of weeds along the roadsides should be devised and control measures planned accordingly.
- ◆ Shrub weeds should not be removed when they are in flower or are seeding unless there is no alternative.

## **Weed and Pathogen Control cont.**

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- ◆ Where shrub weeds must be removed when in flower or are seeding, they will be transported to a designated site, as specified by the Shire Engineer or representatives, for disposal. Such material should be covered to prevent weed seeds blowing onto the roadside and colonising further areas.
- ◆ Vehicles and machinery working in weed infested areas or known pathogen areas should, where possible, be cleaned of soil and washed down thoroughly prior to commencing work on a road of high conservation value.
- ◆ Vehicles and machinery should, where practical, be cleaned of soil and washed down thoroughly each day to prevent the further spread of weeds and soil borne diseases.

## **Herbicides**

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- ◆ Herbicides should only be used in the following situations:
  - to control noxious and environmental weeds
  - in the event that rehabilitation programs are undertaken
  - to control exotic grass and weed growth around roadside facilities and road signs.
  - heavy mulching at the base of road facilities and road signs is a preferred alternative to using herbicides
  - to control exotic grasses and weed growth in inaccessible situations
- ◆ Herbicides will only be used by trained staff, and in accordance with manufacture instructions.
- ◆ Except in the control of noxious and specific environmental weeds, only herbicides with the active ingredient of glyphosate will be used to control weeds.
- ◆ Spot spraying with a back pack, gas gun or the use of a rope wick applicator are the preferred methods of applying herbicides.
- ◆ Records of herbicide use along roadsides will be kept.

## **Vehicle and Machinery Access and Parking**

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- ◆ Vehicles and machinery should not attempt to turn around on a high conservation road, unless at a suitable site where roadside vegetation will not be disturbed.
- ◆ Vehicles and machinery should not deviate from the road formation onto the road reserve during road works.
- ◆ Where vehicles and machinery are left for a period of time or overnight they should be parked in a designated wayside stop or private land of low conservation value.

## **Stock Pile Sites**

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- ◆ A set number of stock pile sites will be designated and approved by the Shire Engineer at strategic locations throughout the Shire.
- ◆ All statutory authorities and contractors undertaking works in the municipality or Shire will be supplied with a location map of designated stock pile sites by the Shire Engineer or representative.
- ◆ Any works carried out that require stock piling of materials will use designated stock pile sites only.
- ◆ New stock pile sites will not be located on roadsides of high conservation value or roadsides adjacent to vegetated areas of high conservation value.
- ◆ Stock pile sites that already exist on or in close proximity to roadsides of high conservation value or other high quality areas of vegetation will be monitored by the Shire for weed growth and the presence of soil borne pathogens such as the cinnamon fungus (*Phytophthora cinnamomi*) and the necessary controls implemented.

## **Waste Management**

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- ◆ Dump sites for disposing of excess materials from road construction or road maintenance operations and the disposal of pest plants, will be designated at strategic locations throughout the municipality by the Shire Engineer.
- ◆ All statutory authorities and contractors undertaking works in the Shire or municipality will be supplied with a list and location map of dump sites, by the Shire Engineer or representative.
- ◆ The Shire Engineer or representative is responsible to monitor all dump sites and provide new locations to all statutory authorities and contractors, as becomes necessary.
- ◆ Soil piles created from grading of shoulders or drains that cannot be retained safely on the road formation will be removed to a designated site or site of low conservation value as specified by the Shire Engineer or representative and not spread over existing vegetation or dumped on a nearby roadside.
- ◆ Litter and excess materials left over from road construction or road maintenance operations will be removed and disposed of at a designated site or site of low conservation value as specified by the Shire Engineer or representative and not spread over existing vegetation or dumped on a nearby roadside.

## **APPENDIX 5**

Plant species in the Shire of Gnowangerup

## Plant species in the Shire of Gnowangerup

Acacia acanthoclada  
Acacia acanthoclada subsp. acanthoclada  
Acacia acuminata subsp. acuminata ms  
Acacia acutata  
Acacia aemula  
Acacia aemula subsp. muricata  
Acacia aff. merrallii  
Acacia amputa ms  
Acacia applanata  
Acacia arcuatis ms P2  
Acacia assimilis subsp. atroviridis  
Acacia awestoniana R  
Acacia baxteri  
Acacia bidentata  
Acacia bifaria P3  
Acacia biflora  
Acacia binata  
Acacia browniana var. intermedia  
Acacia cassicula  
Acacia chamaeleon  
Acacia chrysocephala  
Acacia cochlearis  
Acacia consobrina  
Acacia coolgardiensis subsp. coolgardiensis  
Acacia crassistipula  
Acacia crispula  
Acacia cupularis  
Acacia declinata P3  
Acacia delphina  
Acacia densiflora  
Acacia dictyoneura P2  
Acacia dilatata  
Acacia dissona var. dissona  
Acacia divergens  
Acacia drummondii  
Acacia drummondii subsp. elegans  
Acacia erinacea  
Acacia extensa  
Acacia ferocior  
Acacia glaucoptera  
Acacia gonophylla  
Acacia harveyi  
Acacia hastulata  
Acacia hilliania  
Acacia imparilis ms P2  
Acacia larinica var. larinica  
Acacia lasiocalyx  
Acacia lasiocarpa var. bracteolata  
Acacia lasiocarpa var. sedifolia  
Acacia leioderma  
Acacia leptalea ms R  
Acacia leptospermoides subsp. leptospermoides  
Acacia lineolata subsp. lineolata  
Acacia littorea  
Acacia loxophylla  
Acacia lullfitziorum ms P3  
Acacia luteola  
Acacia mackeyana  
Acacia maxwellii  
Acacia microbotrya  
Acacia mimica var. angusta  
Acacia moirii subsp. moirii  
Acacia multispicata  
Acacia mutabilis subsp. incurva ms P1  
Acacia mutabilis subsp. mutabilis ms  
Acacia mutabilis subsp. rhynchophylla ms P3  
Acacia myrtifolia  
Acacia newbeyi P3  
Acacia octonervia P3  
Acacia papulosa P2  
Acacia patagiata  
Acacia pravifolia  
Acacia pulchella var. goadbyi  
Acacia pulchella var. goadbyi  
Acacia pulviniformis  
Acacia pycnocephala  
Acacia redolens  
Acacia saligna  
Acacia shuttleworthii  
Acacia sphacelata subsp. recurva ms  
Acacia sphacelata subsp. sphacelata ms  
Acacia spongolitica  
Acacia squamata  
Acacia subcaerulea  
Acacia sulcata var. planoconvexa  
Acacia sulcata var. platyphylla  
Acacia tetanophylla  
Acacia tetragonocarpa  
Acacia triptycha  
Acacia trulliformis ms P1  
Acacia varia var. parviflora  
Acacia veronica P3  
Acacia viscifolia  
Acacia willdenowiana  
Acaena echinata  
\* Acetosella vulgaris  
Acrotriche cordata  
Acrotriche ramiflora  
Actinobole uliginosum  
Actinodium calocephalum ms  
Actinostrobus pyramidalis  
Actinotus glomeratus  
Actinotus leucocephalus  
Actinotus rhomboideus P2  
Adenanthos apiculatus  
Adenanthos cuneatus  
Adenanthos filifolius P3  
Adenanthos flavidiflorus  
Adenanthos linearis P2  
Adenanthos meisneri  
Adenanthos obovatus  
Adenanthos pungens subsp. pungens R  
Adenanthos velutinus R  
Agonis floribunda  
Agonis hypericifolia  
Agonis linearifolia  
Agonis marginata  
Agonis parviceps  
Agonis spathulata  
Agrostis preissii  
Agrostocrinum scabrum  
Aira cupaniana  
Aira elegantissima  
Allocasuarina campestris  
Allocasuarina decussata  
Allocasuarina huegeliana  
Allocasuarina humilis  
Allocasuarina lehmanniana  
Allocasuarina lehmanniana subsp. ecarinata  
Allocasuarina lehmanniana subsp. lehmanniana  
Allocasuarina microstachya  
Allocasuarina scleroclada  
Allocasuarina thuyoides  
Allocasuarina trichodon  
Alyogyne hakeifolia  
Alyogyne huegelii



Alyogyne huegelii var. grossulariifolia ms  
 Alyogyne huegelii var. wrayae ms  
 \* Amaranthus albus  
 Amperea conferta  
 Amphibromus nervosus  
 Amphipogon amphipogonoides  
 Amphipogon debilis var. debilis  
 Amphipogon turbinatus  
 Anagallis arvensis  
 Anarthria gracilis  
 Anarthria humilis  
 Anarthria polyphylla  
 Anarthria prolifera  
 Anarthria scabra  
 Andersonia aff. barbata  
 Andersonia aff. caerulea  
 Andersonia aff. lehmanniana  
 Andersonia axilliflora R  
 Andersonia caerulea  
 Andersonia echinocephala P3  
 Andersonia grandiflora P3  
 Andersonia parvifolia  
 Andersonia setifolia P3  
 Andersonia simplex  
 Angianthus preissianus  
 Angianthus tomentosus  
 Anigozanthos bicolor  
 Anigozanthos bicolor subsp. decrescens  
 Anigozanthos gabrielae  
 Anigozanthos humilis  
 Anigozanthos humilis subsp. humilis  
 Anigozanthos onycis  
 Anigozanthos preissii  
 Anigozanthos rufus  
 Anthocercis viscosa subsp. viscosa  
 Anthotium humile  
 Aotus diffusa ms  
 Aotus genistoides  
 Aphia brizula  
 Aphia cyperoides  
 Apium annuum  
 Aristida contorta  
 Arthropodium curvipes  
 \* Asparagus asparagoides  
 Asplenium aethiopicum P4  
 Asplenium flabellifolium  
 Astartea ambigua  
 Astartea fascicularis  
 Astartea heteranthera  
 Asteridea asteroides  
 Asteridea athrixoides  
 Asteridea gracilis P1  
 Asteridea nivea  
 Astroloma baxteri  
 Astroloma ciliatum  
 Astroloma compactum  
 Astroloma drummondii  
 Astroloma epacridis  
 Astroloma pallidum  
 Astroloma prostratum  
 Astroloma serratifolium  
 Astroloma tectum  
 Atriplex exilifolia  
 Atriplex pumilio  
 Atriplex semibaccata  
 Austrodanthonia caespitosa  
 Austrodanthonia pilosa  
 Austrodanthonia setacea  
 Austrostipa elegantissima  
 Austrostipa hemipogon  
 Austrostipa juncifolia  
 Austrostipa macalpinei  
 Austrostipa trichophylla  
 \* Avena barbata  
 Baeckea blackettii  
 Baeckea crispiflora  
 Baeckea crispiflora subsp. Ongerup(A.Scougall & C.Garawanta E35) P1  
 Baeckea latens  
 Baeckea preissiana  
 Banksia aculeata  
 Banksia attenuata  
 Banksia baueri  
 Banksia baxteri  
 Banksia brownii R  
 Banksia caleyi  
 Banksia coccinea  
 Banksia dryandroides  
 Banksia gardneri var. brevidentata  
 Banksia gardneri var. gardneri  
 Banksia grandis  
 Banksia laevigata subsp. laevigata P4  
 Banksia littoralis  
 Banksia media  
 Banksia meisneri subsp. meisneri  
 Banksia nutans  
 Banksia nutans var. cernuella  
 Banksia oreophila  
 Banksia repens  
 Banksia solandri P4  
 Banksia sphaerocarpa  
 Banksia sphaerocarpa var. sphaerocarpa  
 Banksia violacea  
 \* Bartsia trixago  
 Baumea acuta  
 Baumea articulata  
 Baumea juncea  
 Beaufortia anisandra  
 Beaufortia bracteosa  
 Beaufortia cyrtodonta  
 Beaufortia decussata  
 Beaufortia empetrifolia  
 Beaufortia micrantha  
 Beaufortia micrantha var. micrantha  
 Beaufortia schaueri  
 Beaufortia sparsa  
 Billardiera coriacea  
 Billardiera sericea  
 Billardiera variifolia  
 Blennospora drummondii  
 Bolboschoenus caldwellii  
 Boronia albiflora  
 Boronia busselliana  
 Boronia coerulescens  
 Boronia crassifolia  
 Boronia crenulata  
 Boronia crenulata var. angustifolia P4  
 Boronia crenulata var. crenulata  
 Boronia defoliata  
 Boronia inconspicua  
 Boronia inornata  
 Boronia inornata subsp. inornata  
 Boronia inornata subsp. leptophylla  
 Boronia juncea  
 Boronia nematophylla  
 Boronia octandra  
 Boronia oxyantha var. brevicalyx P3  
 Boronia pulchella  
 Boronia ramosa  
 Boronia ramosa subsp. anethifolia

*Boronia scabra*  
*Boronia scabra* subsp. *scabra* ms  
*Boronia spathulata*

*Boronia stricta*  
*Boronia subsessilis*  
*Boronia ternata* var. *austrofoliosa* ms  
*Boronia ternata* var. *foliosa*  
*Borya constricta*  
*Borya laciniata*  
*Borya scirpoidea*  
*Borya sphaerocephala*  
*Bossiaea concinna*  
*Bossiaea divaricata* P3  
*Bossiaea eriocarpa*  
*Bossiaea linophylla*  
*Bossiaea ornata*  
*Bossiaea peduncularis*  
*Bossiaea praetermissa*  
*Bossiaea preissii*  
*Bossiaea rufa*  
*Bossiaea spinescens*  
*Bossiaea walkeri*  
*Brachyloma concolor*  
*Brachyscome* aff. *ciliaris*  
*Brachyscome* aff. *glandulosa*  
*Brachyscome ciliaris*  
*Brachyscome exilis*  
*Brachyscome glandulosa*  
*Brachyscome goniocarpa*  
*Brachyscome iberidifolia*  
*Brachyscome perpusilla*  
*Brachyscome perpusilla* var. *tenella*  
*Brachyscome pusilla*  
*Brachysema bracteolosum*  
*Brachysema celsianum*  
*Brachysema latifolium*  
\* *Bracteantha bracteata*  
\* *Briza maxima*  
\* *Briza minor*  
\* *Bromus diandrus*  
\* *Bromus hordeaceus*  
\* *Bromus rubens*  
*Bulbine semibarbata*  
\* *Bupleurum lancifolium*  
*Burchardia multiflora*  
*Caesia micrantha*  
*Caesia occidentalis*  
\* *Cakile maritima*  
*Caladenia aphylla*  
*Caladenia barbarossa*  
*Caladenia bryceana* subsp. *bryceana* ms R  
*Caladenia cairnsiana*  
*Caladenia chapmanii* ms  
*Caladenia discoidea*  
*Caladenia douthiae*  
*Caladenia falcata*  
*Caladenia filamentosa*  
*Caladenia flava*  
*Caladenia flava* subsp. *flava* ms  
*Caladenia graminifolia*  
*Caladenia heberleana* ms  
*Caladenia hirta* subsp. *hirta* ms  
*Caladenia huegelii* R  
*Caladenia latifolia*  
*Caladenia lobata*  
*Caladenia longicauda* subsp. *eminens* ms  
*Caladenia longiclavata*  
*Caladenia marginata*  
*Caladenia multiclavia*

*Caladenia nana* subsp. *nana* ms  
*Caladenia pectinata*  
*Caladenia plicata* P4  
*Caladenia polychroma* ms  
*Caladenia reptans*  
*Caladenia roei*  
*Caladenia saccharata*  
*Caladenia varians* subsp. *horistes* ms  
*Caladenia vulgata* ms  
*Caladenia x ericksoniae*  
*Caladenia x lavandulacea*  
*Calandrinia uniflora*  
*Calectasia cyanea*  
*Calectasia grandiflora*  
*Callistemon phoeniceus*  
*Callitris drummondii*  
*Callitris roei*  
*Calothamnus affinis* P3  
*Calothamnus crassus* P2  
*Calothamnus gracilis*  
*Calothamnus huegelii*  
*Calothamnus lateralis*  
*Calothamnus lehmannii*  
*Calothamnus microcarpus* P2  
*Calothamnus quadrifidus*  
*Calothamnus quadrifidus* var. "unsorted"  
*Calothamnus sanguineus*  
*Calothamnus schaueri*  
*Calotis erinacea*  
*Calotis lappulacea*  
*Calytrix acutifolia*  
*Calytrix asperula*  
*Calytrix breviseta* subsp. *stipulosa*  
*Calytrix flavescens*  
*Calytrix leschenaultii*  
*Calytrix pulchella* P3  
*Calytrix similis*  
*Calytrix tetragona*  
\* *Carduus pycnocephalus*  
\* *Carduus tenuiflorus*  
*Carex inversa*  
*Carpobrotus modestus*  
\* *Carthamus lanatus*  
*Cassytha aurea* var. *hirta*  
*Cassytha flava*  
*Cassytha glabella*  
*Cassytha glabella* forma *dispar*  
*Cassytha melantha*  
*Cassytha micrantha*  
*Cassytha pomiformis*  
*Cassytha racemosa*  
*Cassytha racemosa* forma *pilosa*  
*Casuarina obesa*  
*Caustis dioica*  
\* *Centaurea melitensis*  
\* *Centaureum erythraea*  
\* *Centaureum tenuiflorum*  
*Centipeda cunninghamii*  
*Centrolepis drummondiana*  
*Centrolepis glabra*  
*Centrolepis humillima*  
*Centrolepis pilosa*  
*Centrolepis polygyna*  
*Centrolepis strigosa* subsp. *strigosa*  
\* *Cerastium glomeratum*  
*Ceratogyne obionoides*  
*Chaetanthus tenellus*  
*Chamaescilla corymbosa*  
*Chamaescilla spiralis*  
*Chamaexeros serra*

Chamelaucium ciliatum  
 Chamelaucium confertiflorum  
 Chamelaucium juniperinum ms P2  
 Chamelaucium pauciflorum pauciflorum ms  
 Cheilanthes austrotenuifolia  
 Cheiranthra filifolia var. brevifolia  
 Cheiranthra filifolia var. filifolia  
 \* Chenopodium album  
 Chenopodium desertorum subsp. microphyllum  
 Chenopodium giganteum  
 \* Chenopodium murale  
 \* Chenopodium pumilio  
 Chloris truncata  
 Chordifex capillaceus ms  
 Chordifex laxus ms  
 Chordifex leucoblepharus ms P1  
 Chordifex ornatus ms P2  
 Chordifex serialis ms  
 Chordifex sphacelatus ms  
 Choretrum glomeratum var. glomeratum  
 Chorizema aciculare subsp. aciculare  
 Chorizema carinatum P3  
 Chorizema cytisoides  
 Chorizema glycinifolium  
 Chorizema rhombeum  
 Chorizema ulotropis P3  
 Chorizema uncinatum  
 Chrysocephalum apiculatum  
 Chrysocoryne drummondii  
 Chrysocoryne tridens  
 \* Cirsium vulgare  
 Clematis pubescens  
 Coleanthera coelophylla P1  
 Comesperma ciliatum  
 Comesperma drummondii  
 Comesperma flavum  
 Comesperma lanceolatum P2  
 Comesperma scoparium  
 Comesperma spinosum  
 Comesperma virgatum  
 Comesperma volubile  
 Commersonia crispa  
 Conospermum amoenum  
 Conospermum bracteosum  
 Conospermum caeruleum  
 Conospermum caeruleum subsp. caeruleum  
 Conospermum caeruleum subsp. oblanceolatum  
 Conospermum canaliculatum  
 Conospermum cinereum ms  
 Conospermum coerulescens subsp. dorrieni ms  
 Conospermum dorrieni  
 Conospermum filifolium subsp. australe ms  
 Conospermum filifolium subsp. filifolium  
 Conospermum flexuosum subsp. flexuosum  
 Conospermum floribundum  
 Conospermum petiolare  
 Conospermum spectabile P2  
 Conospermum stoechadis  
 Conospermum stoechadis subsp. stoechadis  
 Conospermum teretifolium  
 Conospermum triplinervium  
 Conostylis aculeata  
 Conostylis aculeata subsp. aculeata  
 Conostylis argentea  
 Conostylis deplexa  
 Conostylis misera R  
 Conostylis pusilla  
 Conostylis seorsiflora subsp. seorsiflora  
 Conostylis serrulata  
 Conostylis setigera  
 Conostylis setigera subsp. setigera  
 Conostylis vaginata  
 Conothamnus aureus  
 Convolvulus erubescens  
 \* Conyza albida  
 Cooperhookeya polygalacea  
 Cooperhookeya strophiolata  
 Corybas dilatatus  
 Corybas recurvus  
 Corybas recurvus ms  
 Corymbia calophylla  
 Corymbia ficifolia  
 Corynotheca micrantha  
 Corynotheca micrantha var. panda  
 Cotula australis  
 \* Cotula bipinnata  
 Cotula coronopifolia  
 Cotula cotuloides  
 \* Cotula turbinata  
 Craspedia variabilis  
 Crassula colorata  
 \* Crassula decumbens  
 \* Crassula natans  
 Crassula sieberiana subsp. tetramera  
 Cryptandra glabriflora P2  
 Cryptandra leucopogon  
 Cryptandra minutifolia subsp. brevistyla  
 Cryptandra myriantha  
 Cryptandra pungens  
 Cryptandra spyridioides  
 Cryptandra wilsonii  
 Cyanicula caerulea subsp. apertala ms  
 Cyanicula gemmata ms  
 Cyanicula sericea ms  
 Cyathochaeta avenacea  
 Cymbonotus preissianus P2  
 Cymbopogon ambiguus  
 Cyperochloa hirsuta  
 Cyperus sanguinolentus  
 \* Cyperus tenellus  
 Cypselocarpus haloragoides  
 Cytostylis robusta  
 Cytogonidium leptocarpoides ms  
 Damasonium minus  
 Dampiera alata  
 Dampiera diversifolia  
 Dampiera eriocephala  
 Dampiera fasciculata  
 Dampiera juncea  
 Dampiera lavandulacea  
 Dampiera leptoclada  
 Dampiera linearis  
 Dampiera loranthifolia  
 Dampiera pedunculata  
 Dampiera sacculata  
 Dampiera tenuicaulis  
 Danthonia setacea  
 Darwinia collina R  
 Darwinia diosmoides  
 Darwinia halophila ms  
 Darwinia hypericifolia P4  
 Darwinia lejustyla P4  
 Darwinia macrostegia R  
 Darwinia meeboldii R  
 Darwinia oxylepis R  
 Darwinia sp.Mt Success(G.J.Keighery 2299)  
 Darwinia sp.Stirling Range (G.J.Keighery 5732) R  
 Darwinia squarrosa R  
 Darwinia vestita  
 Darwinia wittwerorum R

*Dasypogon bromeliifolius*  
*Daucus glochidiatus*  
*Daviesia abnormis*  
*Daviesia alternifolia*  
*Daviesia angulata*  
*Daviesia articulata*  
*Daviesia crenulata*  
*Daviesia dilatata*  
*Daviesia emarginata*  
*Daviesia flexuosa*  
*Daviesia glossosema* P2  
*Daviesia gracilis*  
*Daviesia hakeoides* subsp. *subnuda* ms  
*Daviesia incrassata*  
*Daviesia incrassata* subsp. *incrassata* ms  
*Daviesia lancifolia*  
*Daviesia lancifolia* subsp.  
*Daviesia mesophylla* P2  
*Daviesia obovata* P2  
*Daviesia oppositifolia*  
*Daviesia preissii*  
*Daviesia pseudaphylla* R  
*Daviesia scoparia*  
*Daviesia trigonophylla*  
*Desmocladius castaneus* ms  
*Desmocladius fasciculatus* ms  
*Desmocladius flexuosus* ms  
*Desmocladius myriocladus* ms  
*Desmocladius quiricanus* ms  
*Desmocladius tenuis* ms  
*Deyeuxia drummondii* X  
*Deyeuxia quadrisetia*  
*Dianella brevicaulis*  
*Dianella revoluta* var. *brevicaulis*  
*Dianella revoluta* var. *divaricata*  
*Dianella revoluta* var. *revoluta*  
*Diaspasis filifolia*  
*Dichelachne crinita*  
*Dichopogon capillipes*  
*Dichopogon fimbriatus*  
*Dillwynia* aff. *uncinata*  
*Dillwynia* sp.A Perth Flora(R.Coveny 8036)  
*Dillwynia uncinata*  
*Diplopeltis eriocarpa*  
*Disphyma crassifolium* subsp. *clavellatum*  
 \* *Dittrichia viscosa*  
*Diuris laevis*  
*Dodonaea* aff. *concinna*  
*Dodonaea amblyophylla*  
*Dodonaea bursariifolia*  
*Dodonaea caespitosa*  
*Dodonaea concinna*  
*Dodonaea humifusa*  
*Dodonaea inaequifolia*  
*Dodonaea pinifolia*  
*Dodonaea ptarmicaefolia*  
*Dodonaea stenozyga*  
*Dodonaea viscosa* subsp. *angustissima*  
*Dodonaea viscosa* subsp. *spatulata*  
*Drakaea confluens* ms R  
*Drakaea glyptodon*  
*Drakaea gracilis* ms  
*Drakaea thynniphila*  
*Drakonorchis barbarossa* ms  
*Drosera androsacea*  
*Drosera barbigera*  
*Drosera erythrorhiza* subsp. *erythrorhiza*  
*Drosera huegelii*  
*Drosera leucoblata*  
*Drosera macrantha*

*Drosera macrantha* subsp. *macrantha*  
*Drosera menziesii* subsp. *penicillaris*  
*Drosera microphylla*  
*Drosera modesta*  
*Drosera neesii* subsp. *neesii*  
*Drosera pallida*  
*Drosera platypoda*  
*Drosera platystigma*  
*Drosera pulchella*  
*Drosera scorpioides*  
*Drosera stolonifera*  
*Drosera stolonifera monticola*  
*Drosera stolonifera* subsp. *compacta*  
*Drosera stolonifera* subsp. *monticola*  
*Drosera subhirtella* subsp. *subhirtella*  
*Drummondita hassellii*  
*Dryandra anatona* R  
*Dryandra arctotidis*  
*Dryandra armata*  
*Dryandra armata* var. *armata*  
*Dryandra armata* var. *ignicida*  
*Dryandra baxteri*  
*Dryandra blechnifolia*  
*Dryandra brownii*  
*Dryandra calophylla* P3  
*Dryandra cirsioides*  
*Dryandra concinna* P4  
*Dryandra conferta* var. *conferta* ms  
*Dryandra conferta* var. *parva* P2  
*Dryandra cuneata*  
*Dryandra drummondii*  
*Dryandra drummondii* subsp. *drummondii*  
*Dryandra falcata*  
*Dryandra ferruginea* subsp. *pumila* P2  
*Dryandra foliolata* P4  
*Dryandra formosa*  
*Dryandra hirsuta* P3  
*Dryandra lepidorhiza* P1  
*Dryandra meganotia* P3  
*Dryandra montana* R  
*Dryandra mucronulata*  
*Dryandra mucronulata* subsp. *mucronulata*  
*Dryandra nervosa*  
*Dryandra nivea*  
*Dryandra nivea* subsp. *nivea*  
*Dryandra nivea* subsp. *nivea* ms  
*Dryandra plumosa*  
*Dryandra plumosa* subsp. *denticulata* P2  
*Dryandra plumosa* subsp. *plumosa*  
*Dryandra porrecta* P4  
*Dryandra pseudoplumosa* P2  
*Dryandra pteridifolia*  
*Dryandra seneciifolia* P3  
*Dryandra sessilis*  
*Dryandra sessilis sessilis*  
*Dryandra sessilis* var. *sessilis*  
*Dryandra tenuifolia*  
*Dryandra tenuifolia* var. *reptans*  
*Dryandra tenuifolia* var. *tenuifolia*  
 \* *Ehrharta calycina*  
 \* *Ehrharta longiflora*  
*Elatine gratiolioides*  
*Eleocharis acuta*  
*Elymus scaber*  
*Elythranthera brunonis*  
*Elythranthera emarginata*  
 \* *Emex australis*  
*Enchylaena tomentosa* var. *tomentosa*  
*Epilobium billardierianum* subsp. *intermedium*  
 \* *Epilobium ciliatum*

*Eragrostis elongata*  
*Eremaea pauciflora*  
*Eremaea pauciflora* var. *pauciflora*  
*Eremaea violacea*  
*Eremophila decipiens* subsp. *decipiens* ms  
*Eremophila denticulata*  
*Eremophila drummondii*  
*Eremophila glabra*  
*Eremophila glabra* subsp. *albicans*  
*Eremophila lehmanniana*  
*Eremophila oppositifolia* subsp. *angustifolia* ms  
*Eremophila veneta* ms R  
*Eriachne ovata*  
*Eriochilus dilatatus* subsp. *dilatatus* ms  
*Eriochilus dilatatus* subsp. *multiflorus* ms  
*Eriochilus helonomos* ms  
*Eriochilus scaber*  
*Eriochilus scaber* subsp. *scaber* ms  
*Eriostemon brucei* subsp. *brucei*  
*Eriostemon nodiflorus* subsp. *lasiocalyx*  
*Eriostemon tomentellus*  
\* *Erodium botrys*  
*Erymophyllum tenellum*  
*Eucalyptus* aff. *lehmannii*  
*Eucalyptus* aff. *medialis*  
*Eucalyptus* aff. *pachyloma*  
*Eucalyptus* aff. *uncinata*  
*Eucalyptus angulosa*  
*Eucalyptus annulata*  
*Eucalyptus argyphaea*  
*Eucalyptus aspratilis*  
*Eucalyptus astringens* subsp. *astringens*  
*Eucalyptus astringens* subsp. *oligocorma* ms  
*Eucalyptus buprestium*  
*Eucalyptus buprestium* x *erectifolia* P4  
*Eucalyptus buprestium* x *ligulata* P4  
*Eucalyptus buprestium* x *marginata* P4  
*Eucalyptus buprestium* x *staeri* P4  
*Eucalyptus burdettiana* R  
*Eucalyptus calycogona* var. *calycogona*  
*Eucalyptus captiosa*  
*Eucalyptus celastroides* subsp. *virella*  
*Eucalyptus clivicola*  
*Eucalyptus comitae-vallis*  
*Eucalyptus conglobata*  
*Eucalyptus cornuta*  
*Eucalyptus cylindriflora*  
*Eucalyptus decipiens* subsp. *chalara*  
*Eucalyptus decurva*  
*Eucalyptus densa*  
*Eucalyptus densa* subsp. *densa*  
*Eucalyptus doratoxylon*  
*Eucalyptus erectifolia* P4  
*Eucalyptus falcata*  
*Eucalyptus falcata* subsp. *falcata*  
*Eucalyptus flocktoniae*  
*Eucalyptus gardneri*  
*Eucalyptus glomerifera* ms  
*Eucalyptus goniantha* subsp. *goniantha* R  
*Eucalyptus goniantha* subsp. *notactites*  
*Eucalyptus hypochlamydea* subsp. *hypochlamydea* ms  
*Eucalyptus incrassata*  
*Eucalyptus lehmannii*  
*Eucalyptus leptopoda* subsp. *leptopoda*  
*Eucalyptus ligulata* P4  
*Eucalyptus longicornis*  
*Eucalyptus loxophleba* subsp. *lissophloia*  
*Eucalyptus loxophleba* subsp. *loxophleba*  
*Eucalyptus macrandra*  
*Eucalyptus marginata* subsp. *elegantella* P2  
*Eucalyptus marginata* subsp. *marginata*  
*Eucalyptus marginata* x *pachyloma* P4  
*Eucalyptus medialis*  
*Eucalyptus megacarpa*  
*Eucalyptus melanophitra* P4  
*Eucalyptus mesopoda* ms  
*Eucalyptus occidentalis*  
*Eucalyptus oleosa*  
*Eucalyptus oligocorma* ms  
*Eucalyptus pachyloma*  
*Eucalyptus perangusta*  
*Eucalyptus petila* ms P2  
*Eucalyptus phaenophylla*  
*Eucalyptus phaenophylla* subsp. *interjacens*  
*Eucalyptus phaenophylla* subsp. *phaenophylla*  
*Eucalyptus phenax*  
*Eucalyptus platypus*  
*Eucalyptus platypus* subsp. *platypus*  
*Eucalyptus platypus* var. *platypus*  
*Eucalyptus pleurocarpa*  
*Eucalyptus pluricaulis* subsp. *pluricaulis*  
*Eucalyptus pluricaulis* subsp. *porphyrea*  
*Eucalyptus preissiana*  
*Eucalyptus preissiana* subsp. *preissiana*  
*Eucalyptus preissiana* x *staeri* P4  
*Eucalyptus recondita* ms  
*Eucalyptus redacta* ms  
*Eucalyptus redacta* subsp. *redacta* ms  
*Eucalyptus redacta* subsp. *thamnoides* ms  
*Eucalyptus rudis*  
*Eucalyptus scyphocalyx*  
*Eucalyptus spathulata*  
*Eucalyptus spathulata* subsp. *spathulata*  
*Eucalyptus sporadica* ms  
*Eucalyptus staeri*  
*Eucalyptus subangusta* subsp. *pusilla*  
*Eucalyptus suggrandis* subsp. *alipes*  
*Eucalyptus suggrandis* subsp. *suggrandis*  
*Eucalyptus talyuberlup*  
*Eucalyptus tenera*  
*Eucalyptus tetraptera*  
*Eucalyptus transcontinentalis*  
*Eucalyptus uncinata*  
*Eucalyptus utilis* ms  
*Eucalyptus vegrandis*  
*Eucalyptus vegrandis* ms  
*Eucalyptus wandoo*  
*Eucalyptus wandoo* subsp. *wandoo*  
*Eucalyptus* x *erythrandra* P4  
*Eucalyptus* x *kalganensis* P2  
*Eucalyptus xanthonema* subsp. *apposita*  
*Eucalyptus xanthonema* subsp. *xanthonema*  
*Euchiton sphaericus*  
\* *Euphorbia peplus*  
*Euphrasia scabra* P2  
*Eutaxia cuneata*  
*Eutaxia densifolia*  
*Eutaxia microphylla*  
*Eutaxia microphylla* var. *microphylla*  
*Eutaxia obovata*  
*Eutaxia parvifolia*  
*Eutaxia virgata*  
*Exocarpos aphyllus*  
*Exocarpos sparteus*  
*Frankenia tetrapetala*  
*Franklandia fucifolia*  
\* *Fumaria muralis*  
*Gahnia ancistrophylla*  
*Gahnia decomposita*

Gahnia lanigera  
 Gahnia trifida  
 \* Galium murale  
 \* Gamochaeta falcata  
 Gastrolobium bilobum  
 Gastrolobium crassifolium  
 Gastrolobium parviflorum  
 Gastrolobium parvifolium  
 Gastrolobium pusillum  
 Gastrolobium spinosum  
 Gastrolobium spinosum var. spinosum  
 Gastrolobium tetragonophyllum  
 Gastrolobium tomentosum P4  
 Gastrolobium velutinum  
 Genoplesium nigricans ms  
 Geranium retrorsum  
 Geranium solanderi  
 Glischrocaryon aureum  
 Glischrocaryon aureum var. angustifolium  
 Glischrocaryon flavescens  
 Glischrocaryon roei  
 Glycine clandestina  
 Gnaphalium indutum  
 Gnephosis drummondii  
 Gnephosis tenuissima  
 Gnephosis uniflora  
 Gompholobium aff. confertum  
 Gompholobium amplexicaule  
 Gompholobium aristatum  
 Gompholobium burtonioides  
 Gompholobium confertum  
 Gompholobium knightianum  
 Gompholobium marginatum  
 Gompholobium polymorphum  
 Gompholobium preissii  
 Gompholobium scabrum  
 Gompholobium tomentosum  
 Gompholobium venustum  
 Gompholobium villosum  
 Gompholobium viscidulum  
 Gonocarpus benthamii  
 Gonocarpus benthamii subsp. Stirling(C.J.Robinson 1080) P2  
 Gonocarpus nodulosus  
 Gonocarpus paniculatus  
 Gonocarpus rudis P2  
 Goodenia affinis  
 Goodenia berardiana  
 Goodenia caerulea  
 Goodenia concinna  
 Goodenia incana  
 Goodenia micrantha  
 Goodenia micrantha  
 Goodenia pterigosperma  
 Goodenia pulchella  
 Goodenia scapigera  
 Goodenia tripartita  
 Goodenia viscida  
 Goodia medicaginea  
 Gratiola pubescens  
 Grevillea acuaria  
 Grevillea anethifolia  
 Grevillea apiciloba subsp. apiciloba  
 Grevillea decipiens  
 Grevillea dolichopoda  
 Grevillea fasciculata  
 Grevillea huegelii  
 Grevillea maxwellii R  
 Grevillea muelleri  
 Grevillea newbeyi P3  
 Grevillea nudiflora  
 Grevillea obtusifolia  
 Grevillea oligantha  
 Grevillea patentiloba subsp. patentiloba  
 Grevillea pauciflora  
 Grevillea pectinata  
 Grevillea pulchella subsp. ascendens  
 Grevillea pulchella subsp. ascendens ms  
 Grevillea pulchella subsp. pulchella ms  
 Grevillea synapheae  
 Grevillea trifida  
 Grevillea tripartita  
 Grevillea umbellulata subsp. umbellulata  
 Grevillea uncinulata subsp. uncinulata  
 \* Gynandris setifolia  
 Haegiela tatei P2  
 Haemodorum brevisepalum  
 Haemodorum discolor  
 Haemodorum simplex  
 Haemodorum spicatum  
 Hakea ambigua  
 Hakea baxteri  
 Hakea ceratophylla  
 Hakea corymbosa  
 Hakea cucullata  
 Hakea denticulata  
 Hakea erecta  
 Hakea falcata  
 Hakea ferruginea  
 Hakea florida  
 Hakea lasiantha  
 Hakea laurina  
 Hakea lehmanniana  
 Hakea lissocarpa  
 Hakea marginata  
 Hakea marginata subsp. marginata  
 Hakea nitida  
 Hakea obliqua subsp. parviflora  
 Hakea oldfieldii P2  
 Hakea pandanicarpa  
 Hakea preissii  
 Hakea prostrata  
 Hakea rubriflora  
 Hakea sulcata  
 Hakea trifurcata  
 Hakea undulata  
 Hakea varia  
 Halosarcia halocnemoides  
 Halosarcia halocnemoides subsp. halocnemoides  
 Halosarcia indica subsp. bidens  
 Halosarcia lepidosperma  
 Halosarcia pergranulata subsp. pergranulata  
 Halosarcia syncarpa  
 Harperia confertospicata ms P3  
 Harperia lateriflora  
 Helichrysum leucopsidium  
 Helichrysum macranthum  
 Hemiandra pungens  
 Hemigenia platyphylla P4  
 Hemigenia podalyrina  
 Hemigenia sp. Albany(G.J.Keighery 8712)  
 Hibbertia acerosa  
 Hibbertia aff. gracilipes  
 Hibbertia aff. recurvifolia  
 Hibbertia amplexicaulis  
 Hibbertia argentea P3  
 Hibbertia commutata  
 Hibbertia cunninghamii  
 Hibbertia enervia  
 Hibbertia gracilipes  
 Hibbertia helianthemoides

*Hibbertia hypericoides*  
*Hibbertia inconspicua*  
*Hibbertia lineata*  
*Hibbertia microphylla*  
*Hibbertia pulchra*  
*Hibbertia pungens*  
*Hibbertia racemosa*  
*Hibbertia recurvifolia*  
*Hibbertia rupicola*  
*Hibbertia selkii*  
*Hibbertia* sp.Price(J.R.Wheeler 2511)  
*Hibbertia* sp.Stirlings(J.R.Wheeler 2453)  
*Hibbertia subvaginata*  
 \* *Hibiscus trionum*  
*Homalospermum firmum*  
 \* *Homeria flaccida*  
 \* *Hordeum distichon*  
 \* *Hordeum leporinum*  
 \* *Hordeum marinum*  
*Hornungia procumbens*  
*Hovea chorizemifolia*  
*Hovea elliptica*  
*Hovea pungens*  
*Hovea trisperma*  
*Hyalochlamys globifera*  
*Hyalosperma glutinosum*  
*Hyalosperma glutinosum* subsp. *glutinosum*  
*Hybanthus epacroides*  
*Hybanthus floribundus* subsp. *floribundus*  
*Hydrocotyle alata*  
*Hydrocotyle callicarpa*  
*Hydrocotyle diantha*  
*Hydrocotyle medicaginoides*  
*Hydrocotyle pilifera* var. *glabrata*  
*Hydrocotyle rugulosa*  
*Hypocalymma angustifolium*  
*Hypocalymma asperum*  
*Hypocalymma cordifolium*  
*Hypocalymma myrtifolium*  
*Hypocalymma phillipsii* P3  
*Hypocalymma speciosum*  
*Hypocalymma strictum*  
*Hypocalymma strictum* subsp. *elongatum* ms  
*Hypochaeris glabra*  
*Hypolaena exsulca*  
*Hypolaena fastigiata*  
*Hypoxis glabella* var. *leptantha*  
*Isolepis congrua*  
*Isolepis cyperoides*  
*Isolepis marginata*  
*Isolepis nodosa*  
*Isolepis stellata*  
*Isopogon baxteri*  
*Isopogon buxifolius*  
*Isopogon buxifolius* var. *obovatus*  
*Isopogon cuneatus*  
*Isopogon formosus* subsp. *formosus*  
*Isopogon heterophyllus*  
*Isopogon latifolius* P3  
*Isopogon longifolius*  
*Isopogon teretifolius* subsp. *petrophiloides*  
*Isopogon teretifolius* subsp. *petrophiloides* ms  
*Isopogon teretifolius* subsp. *teretifolius* ms  
*Isopogon trilobus*  
*Isotoma hypocrateriformis*  
*Isotoma scapigera*  
*Isotropis cuneifolia*  
*Isotropis drummondii*  
*Isotropis juncea*  
*Jacksonia calycina* P4

*Jacksonia capitata*  
*Jacksonia condensata*  
*Jacksonia debilis* ms P1  
*Jacksonia grevilleoides*  
*Jacksonia humilis* ms  
*Jacksonia racemosa*  
*Jacksonia spinosa*  
*Johnsonia acaulis*  
*Johnsonia lupulina*  
*Johnsonia teretifolia*  
 \* *Juncus bufonius*  
*Juncus caespiticus*  
 \* *Juncus capitatus*  
*Juncus kraussii*  
*Juncus kraussii* subsp. *australiensis*  
 \* *Juncus microcephalus*  
*Juncus pallidus*  
*Juncus radula*  
*Juncus subsecundus*  
*Kennedia coccinea*  
*Kennedia eximia*  
*Kennedia prostrata*  
*Kingia australis*  
*Kunzea baxteri*  
*Kunzea micrantha*  
*Kunzea micromera*  
*Kunzea montana*  
*Kunzea preissiana*  
*Kunzea recurva*  
 \* *Lactuca saligna*  
*Lagenifera huegelii*  
*Lambertia ericifolia*  
*Lambertia fairallii* R  
*Lambertia inermis*  
*Lambertia inermis* var. *drummondii*  
*Lambertia inermis* var. *inermis*  
*Lambertia uniflora*  
 \* *Lamium amplexicaule*  
*Lasiopetalum dielsii* P2  
*Lasiopetalum fitzgibbonii* P3  
*Lasiopetalum indutum*  
*Lasiopetalum microcardium*  
*Lasiopetalum monticola* P3  
*Lasiopetalum rosmarinifolium*  
 \* *Lathyrus latifolius*  
*Latrobea aff. hirtella*  
*Latrobea hirtella*  
*Latrobea tenella*  
 \* *Lavatera arborea*  
*Lawrencella rosea*  
*Lawrencella berthae*  
*Lawrencella diffusa*  
*Lawrencella glomerata*  
*Lawrencella squamata*  
*Laxmannia brachyphylla*  
*Laxmannia grandiflora* subsp. *stirlingensis* P3  
*Laxmannia minor*  
*Laxmannia omnifertilis*  
*Laxmannia paleacea*  
*Laxmannia ramosa* subsp. *deflexa*  
*Laxmannia ramosa* subsp. *ramosa*  
*Laxmannia sessiliflora*  
*Laxmannia sessiliflora* subsp. *australis*  
*Laxmannia squarrosa*  
*Lechenaultia aff. tubiflora*  
*Lechenaultia expansa*  
*Lechenaultia formosa*  
*Lechenaultia tubiflora*  
 \* *Lepidium africanum*  
*Lepidium aschersonii* X

*Lepidium pseudotasmanicum* P4  
*Lepidium rotundum*  
*Lepidobolus chaetocephalus*  
*Lepidobolus preissianus*  
*Lepidosperma* aff. *drummondii*  
*Lepidosperma* aff. *resinosum*  
*Lepidosperma* aff. *tenuis*  
*Lepidosperma brunonianum*  
*Lepidosperma drummondii*  
*Lepidosperma effusum*  
*Lepidosperma gracile*  
*Lepidosperma leptostachyum*  
*Lepidosperma longitudinale*  
*Lepidosperma persecans*  
*Lepidosperma pubisquamum*  
*Lepidosperma* sp.A2 Island Flat(G.J.Keighery 7000)  
*Lepidosperma squamatum*  
*Lepidosperma striatum*  
*Lepidosperma tuberculatum*  
*Lepidosperma viscidum*  
*Leporella fimbriata*  
*Leptocarpus coangustatus*  
*Leptoceras menziesii*  
*Leptomeria ericoides*  
*Leptomeria lehmannii*  
*Leptomeria pachyclada*  
*Leptomeria pauciflora*  
*Leptomeria preissiana*  
*Leptomeria scrobiculata*  
*Leptomeria squarrulosa*  
*Leptospermum* aff. *roei*  
*Leptospermum erubescens*  
*Leptospermum oligandrum*  
*Lepyrodia drummondiana*  
*Leucopogon acicularis*  
*Leucopogon* aff. *conostephioides*  
*Leucopogon* aff. *hamulosus*  
*Leucopogon* aff. *lasiostachyus*  
*Leucopogon* aff. *polymorphus*  
*Leucopogon atherolepis*  
*Leucopogon australis*  
*Leucopogon australis* subsp. *acutifolius* ms  
*Leucopogon bracteolaris* P2  
*Leucopogon capitellatus*  
*Leucopogon carinatus*  
*Leucopogon concinnus*  
*Leucopogon conostephioides*  
*Leucopogon corifolius*  
*Leucopogon corynocarpus*  
*Leucopogon cucullatus*  
*Leucopogon cymbiformis*  
*Leucopogon denticulatus* P2  
*Leucopogon dielsianus*  
*Leucopogon distans* subsp. *contractus*  
*Leucopogon distans* subsp. *contractus* ms  
*Leucopogon distans* subsp. *contractus* ms  
*Leucopogon durus*  
*Leucopogon elatior*  
*Leucopogon elegans*  
*Leucopogon fimbriatus*  
*Leucopogon flavescens*  
*Leucopogon florulentus* P1  
*Leucopogon gibbosus*  
*Leucopogon glaucifolius* P2  
*Leucopogon gnaphalioides* R  
*Leucopogon lasiophyllus* P2  
*Leucopogon lasiostachyus*  
*Leucopogon leptanthus*  
*Leucopogon minutifolius*  
*Leucopogon mollis*  
*Leucopogon obovatus*  
*Leucopogon opponens*  
*Leucopogon oppositifolius*  
*Leucopogon oxycedrus*  
*Leucopogon pendulus*  
*Leucopogon pogonocalyx* P1  
*Leucopogon polymorphus*  
*Leucopogon propinquus*  
*Leucopogon pubescens*  
*Leucopogon pulchellus*  
*Leucopogon revolutus*  
*Leucopogon rubicundus*  
*Leucopogon sprengeioides*  
*Leucopogon striatus*  
*Leucopogon tamariscinus* P2  
*Leucopogon tamminensis*  
*Leucopogon tenuis*  
*Leucopogon tetragonus*  
*Leucopogon unilateralis*  
*Leucopogon woodsii*  
*Levenhookia dubia*  
*Levenhookia pauciflora*  
*Levenhookia pusilla*  
 \* *Limonium sinuatum*  
*Limosella australis*  
*Linum marginale*  
 \* *Linum usitatissimum*  
*Lobelia gibbosa*  
*Lobelia heterophylla*  
*Lobelia rhombifolia*  
*Lobelia tenuior*  
*Logania buxifolia*  
*Logania campanulata*  
*Logania flaviflora*  
*Logania micrantha*  
*Logania serpyllifolia*  
*Logania serpyllifolia* subsp. *angustifolia*  
*Logania serpyllifolia* subsp. *serpyllifolia*  
*Logania vaginalis*  
 \* *Lolium perenne*  
 \* *Lolium temulentum*  
*Lomandra effusa*  
*Lomandra hastilis*  
*Lomandra micrantha* subsp. *micrantha*  
*Lomandra nigricans*  
*Lomandra nutans*  
*Lomandra pauciflora*  
*Lomandra preissii*  
*Lomandra rupestris*  
*Lomandra sericea*  
*Lomandra sonderi*  
*Loxocarya striata* ms  
*Luzula meridionalis*  
*Lyginia barbata*  
*Lysinema ciliatum*  
*Lysinema ciliatum* forma *Esperance*(G.Perry 176)  
*Lysinema ciliatum* forma *Mt Barren*(E. & S.Pignatti 1409)  
*Lysinema conspicuum*  
*Lysinema fimbriatum*  
*Lysiosepalum involucratum*  
 \* *Lythrum hyssopifolia*  
*Macrozamia riedlei*  
*Maireana brevifolia*  
*Maireana georgei*  
*Maireana tomentosa* subsp. *tomentosa*  
*Maireana trichoptera*  
*Mallophora globiflora*  
*Marianthus erubescens*  
*Marsilea drummondii*  
 \* *Medicago minima*



\* *Medicago scutellata*  
*Meeboldina kraussii* ms  
*Melaleuca* ? *citrina*  
*Melaleuca acuminata* subsp. *acuminata* ms  
*Melaleuca adnata*  
*Melaleuca* aff. *pungens*  
*Melaleuca* aff. *scabra*  
*Melaleuca apodocephala* subsp. *apodocephala* ms  
*Melaleuca araucarioides* P3  
*Melaleuca blaeriifolia*  
*Melaleuca bracteosa*  
*Melaleuca bromelioides*  
*Melaleuca calycina*  
*Melaleuca carrii* ms  
*Melaleuca coronicarpa*  
*Melaleuca cucullata*  
*Melaleuca cuticularis*  
*Melaleuca densa*  
*Melaleuca depauperata*  
*Melaleuca diosmifolia* P3  
*Melaleuca elliptica*  
*Melaleuca glaberrima*  
*Melaleuca halmaturorum*  
*Melaleuca hamulosa*  
*Melaleuca haplantha*  
*Melaleuca lateralis*  
*Melaleuca lateriflora* subsp. *lateriflora* ms  
*Melaleuca laxiflora*  
*Melaleuca micromera* P3  
*Melaleuca microphylla*  
*Melaleuca pauciflora*  
*Melaleuca pauperiflora* subsp. *pauperiflora*  
*Melaleuca pentagona*  
*Melaleuca pentagona* var. *subulifolia*  
*Melaleuca platycalyx*  
*Melaleuca polycephala* P3  
*Melaleuca preissiana*  
*Melaleuca pritzelii* P2  
*Melaleuca pungens*  
*Melaleuca rigidifolia*  
*Melaleuca scabra*  
*Melaleuca sclerophylla* P3  
*Melaleuca societatis* ms  
*Melaleuca spathulata*  
*Melaleuca spicigera*  
*Melaleuca striata*  
*Melaleuca strobophylla*  
*Melaleuca suberosa*  
*Melaleuca subfalcata*  
*Melaleuca thymoides*  
*Melaleuca thyoides*  
*Melaleuca torquata*  
*Melaleuca trichophylla*  
*Melaleuca uncinata*  
*Melaleuca undulata*  
*Melaleuca viminea* subsp. *appressa* P2  
*Melaleuca viminea* subsp. *viminea*  
*Melaleuca violacea*  
 \* *Melilotus officinalis*  
*Mesomelaena graciliceps*  
*Mesomelaena stygia*  
*Mesomelaena stygia* subsp. *stygia*  
*Mesomelaena tetragona*  
*Microcorys glabra*  
*Microcorys lenticularis* P2  
*Microcorys subcanescens*  
*Microcorys virgata* P2  
*Microcybe multiflora* subsp. *multiflora*  
*Microcybe pauciflora* subsp. *pauciflora*  
*Microcybe pauciflora* subsp. *pauciflora* ms  
*Microlepidium pilosulum*  
*Microtis alba*  
*Microtis brownii*  
*Microtis media*  
*Millotia major*  
*Millotia myosotidifolia*  
*Millotia tenuifolia*  
*Millotia tenuifolia* var. *tenuifolia*  
*Mirbelia dilatata*  
*Mirbelia floribunda*  
*Mirbelia ovata*  
*Mirbelia subcordata*  
*Mirbelia trichocalyx*  
*Mitrasacme ambigua*  
 \* *Moluccella laevis*  
 \* *Monadenia bracteata*  
 \* *Monopsis debilis*  
*Monotaxis grandiflora*  
*Monotoca oligarrhenoides*  
*Monotoca tamariscina*  
*Muiriantha hassellii* P2  
*Myoporum cordifolium* R  
*Myoporum tetrandrum*  
*Myriocephalus occidentalis*  
*Needhamiella pumilio*  
*Nemcia carinata*  
*Nemcia emarginata*  
*Nemcia hookeri*  
*Nemcia leakeana*  
*Nemcia luteifolia* P2  
*Nemcia mondurup* ms  
*Nemcia plicata*  
*Nemcia pulchella*  
*Nemcia punctata*  
*Nemcia pyramidalis*  
*Nemcia retusa*  
*Nemcia rubra*  
*Nemcia* sp. *crenulata capitata* (E. & S. Pignatti) P2  
*Nemcia* sp. *Ellen Peak* (S. Barrett 245) P2  
*Nemcia vestita* P2  
*Neurachne alopecuroidea*  
*Nuytsia floribunda*  
*Olax benthamiana*  
*Olax phyllanthi*  
*Olax scalariformis* P3  
*Olearia brachyphylla*  
*Olearia ciliata*  
*Olearia homolepis*  
*Olearia imbricata*  
*Olearia muelleri*  
*Olearia muricata*  
*Olearia ramosissima*  
*Oligarrhena micrantha*  
*Onychosepalum laxiflorum*  
*Opercularia hispidula*  
*Opercularia liberiflora*  
*Opercularia spermacocea*  
*Opercularia vaginata*  
*Opercularia volubilis*  
*Ophioglossum lusitanicum*  
 \* *Ornithopus pinnatus*  
 \* *Orobanche minor*  
*Orthrosanthus laxus* var. *laxus*  
*Orthrosanthus muelleri* R  
*Orthrosanthus multiflorus*  
 \* *Osteospermum clandestinum*  
 \* *Oxalis corniculata*  
*Oxalis perennans*  
 \* *Oxalis pes-caprae*  
*Oxylobium microphyllum*

*Ozothamnus lepidophyllus*  
 \* *Papaver hybridum*  
*Paracaleana nigrata*  
 \* *Parapholis incurva*  
 \* *Parentucellia latifolia*  
*Patersonia occidentalis*  
*Patersonia umbrosa* var. *umbrosa*  
*Pelargonium havlasae*  
*Pelargonium littorale*  
*Pelargonium littorale* subsp. *littorale*  
*Pentapeltis silvatica*  
 \* *Pentaschistis airoides*  
*Pericalymma ellipticum* var. *ellipticum* ms  
*Pericalymma ellipticum* var. *floridum* ms  
*Pericalymma spongiocaulum* ms  
*Persicaria prostrata*  
*Persoonia longifolia*  
*Persoonia micranthera* R  
*Persoonia striata*  
*Persoonia teretifolia*  
*Petrophile anceps*  
*Petrophile biternata* P3  
*Petrophile brevifolia*  
*Petrophile carduacea*  
*Petrophile divaricata*  
*Petrophile ericifolia* subsp. *ericifolia* ms  
*Petrophile heterophylla*  
*Petrophile longifolia*  
*Petrophile media*  
*Petrophile phyllicoides*  
*Petrophile rigida*  
*Petrophile semifurcata*  
*Petrophile seminuda*  
*Petrophile serruriae*  
*Petrophile squamata*  
*Petrophile squamata* subsp. *squamata*  
*Petrophile teretifolia*  
 \* *Phalaris minor*  
 \* *Phalaris paradoxa*  
*Phebalium filifolium*  
*Phebalium microphyllum*  
*Phebalium rude*  
*Phebalium rude* subsp. *amblycarpum*  
*Phebalium rude* subsp. *rude*  
*Phebalium tuberculatum*  
*Philydrella pygmaea*  
*Phlebocarya ciliata*  
*Phyllangium divergens*  
*Phyllangium paradoxum* ms  
*Phyllanthus calycinus*  
*Phyllota barbata*  
*Phymatocarpus maxwellii*  
*Phymatocarpus porphyrocephalus*  
*Pilostyles collina* P4  
*Pilularia novae-hollandiae*  
*Pimelea angustifolia*  
*Pimelea argentea*  
*Pimelea brachyphylla*  
*Pimelea brevifolia* subsp. *brevifolia*  
*Pimelea cracens* subsp. *cracens*  
*Pimelea erecta*  
*Pimelea hispida*  
*Pimelea imbricata*  
*Pimelea imbricata* var. *piliger*  
*Pimelea lehmanniana* subsp. *lehmanniana*  
*Pimelea longiflora* subsp. *longiflora*  
*Pimelea suaveolens* subsp. *suaveolens*  
*Pimelea sulphurea*  
*Pimelea sylvestris*  
*Pimelea tinctoria*

\* *Plantago coronopus* subsp. *commutata*  
*Plantago debilis*  
*Plantago hispida*  
*Platysace commutata*  
*Platysace compressa*  
*Platysace juncea*  
*Platysace maxwellii*  
*Platysace* sp. *Stirling* (J.M.Fox 88/262) P2  
*Platytheca galioides*  
*Platytheca juniperina*  
*Pleurosorus rutifolius*  
 \* *Poa annua*  
*Poa drummondiana*  
*Poa porphyroclados*  
*Poa serpentum*  
*Podolepis canescens*  
*Podolepis capillaris*  
*Podolepis lessonii*  
*Podolepis rugata*  
*Podotroche angustifolia*  
*Pogonolepis muelleriana*  
*Pogonolepis stricta*  
 \* *Polycarpon tetraphyllum*  
*Pomaderris brevifolia*  
*Poranthera ericoides*  
*Poranthera huegelii*  
*Poranthera microphylla*  
*Potamogeton ? javanicus*  
*Praecoxanthus aphyllus* ms  
*Prasophyllum cucullatum*  
*Prasophyllum cyphochilum*  
*Prasophyllum elatum*  
*Prasophyllum gibbosum*  
*Prasophyllum gracile*  
*Prasophyllum hians*  
*Prasophyllum nigricans*  
*Prasophyllum plumiforme*  
*Prasophyllum triangulare*  
*Prostanthera serpyllifolia* subsp. *microphylla*  
*Pseudanthus virgatus*  
 \* *Pseudognaphalium luteo-album*  
*Pteridium esculentum*  
*Pterochaeta paniculata*  
*Pterostylis ciliata*  
*Pterostylis hamiltonii*  
*Pterostylis leptochila*  
*Pterostylis mutica*  
*Pterostylis recurva*  
*Pterostylis sargentii*  
*Pterostylis vittata*  
*Ptilotus drummondii* var. *drummondii*  
*Ptilotus humilis* subsp. *humilis*  
*Ptilotus manglesii*  
*Ptilotus polystachyus* var. *polystachyus*  
*Ptilotus spathulatus*  
*Ptilotus spathulatus* forma "unsorted"  
*Ptilotus spathulatus* forma *spathulatus*  
*Pultenaea adunca*  
*Pultenaea aff. aspalathoides*  
*Pultenaea aspalathoides*  
*Pultenaea barbata*  
*Pultenaea calycina*  
*Pultenaea conferta*  
*Pultenaea empetrifolia*  
*Pultenaea ericifolia*  
*Pultenaea linearifolia*  
*Pultenaea neurocalyx*  
*Pultenaea ochreatea*  
*Pultenaea rotundifolia*  
*Pultenaea strobilifera*

*Pultenaea verruculosa*  
*Pultenaea verruculosa* var. *brachyphylla*  
*Pultenaea verruculosa* var. *brachyphylla*  
*Pultenaea verruculosa* var. *pilosa*  
*Pultenaea vestita*  
*Pyrorchis nigricans*  
*Quinetia urvillei*  
*Ranunculus sessiliflorus* var. *sessiliflorus*  
\* *Raphanus raphanistrum*  
*Regelia inops*  
*Rhagodia drummondii*  
*Rhagodia preissii* subsp. *preissii*  
*Rhodanthe citrina*  
*Rhodanthe laevis*  
*Rhodanthe manglesii*  
*Rhodanthe polycephala*  
*Rhodanthe pygmaea*  
*Rhodanthe spicata*  
*Rinzia communis*  
*Rinzia fumana*  
*Rinzia longifolia* P1  
*Rinzia morrisonii*  
\* *Romulea rosea*  
\* *Romulea rosea* var. *australis*  
\* *Romulea rosea* var. *communis*  
\* *Rostraria cristata*  
*Rulingia cuneata*  
*Rulingia grandiflora*  
*Rulingia platycalyx*  
*Rulingia rotundifolia*  
\* *Rumex brownii*  
\* *Rumex crispus*  
\* *Sagina apetala*  
*Salsola kali*  
*Samolus junceus*  
*Samolus repens*  
*Santalum acuminatum*  
*Santalum murrayanum*  
*Sarcocornia quinqueflora*  
*Scaevola argentea*  
*Scaevola hamiltonii*  
*Scaevola lanceolata*  
*Scaevola nitida*  
*Scaevola phlebopetala*  
*Scaevola pulvinaris*  
*Scaevola striata*  
*Scaevola striata* var. *arenaria*  
*Scaevola striata* var. *striata*  
*Scaevola thesioides*  
*Scaevola thesioides* subsp. *filifolia*  
*Schizaea fistulosa*  
*Schoenia cassiniana*  
*Schoenolaena tenuior*  
*Schoenus aff. subflavus*  
*Schoenus armeria*  
*Schoenus brevisetis*  
*Schoenus caespititius*  
*Schoenus curvifolius*  
*Schoenus efoliatus*  
*Schoenus humilis*  
*Schoenus laevigatus*  
*Schoenus nanus*  
*Schoenus obtusifolius*  
*Schoenus pleiostemoneus*  
*Schoenus sesquispiculus*  
*Schoenus* sp. *Stirling* (G.J. Keighery 3427) P2  
*Schoenus subbarbatus*  
*Schoenus subfascicularis*  
*Schoenus subflavus*  
*Schoenus subflavus* subsp. *Hispid Culms* (K.R. Newbey 8278)

*Schoenus submicrostachyus*  
*Sclerolaena diacantha*  
\* *Senecio diaschides*  
*Senecio glomeratus*  
*Senecio glossanthus*  
*Senecio hispidulus*  
*Senecio hispidulus* var. *hispidulus*  
*Senecio lautus*  
*Senecio lautus* subsp. *dissectifolius*  
*Senecio picridioides*  
*Senecio quadridentatus*  
*Senna artemisioides*  
*Senna artemisioides* subsp. *filifolia*  
*Siegfriedia darwinioides* P3  
*Siloxerus humifusus*  
*Siloxerus multiflorus*  
*Siloxerus pygmaeus*  
\* *Sisymbrium orientale*  
*Solanum capsiciforme*  
*Solanum nummularium*  
*Solanum oldfieldii*  
*Solanum simile*  
*Sollya drummondii* P2  
*Sollya heterophylla*  
\* *Sonchus asper* subsp. *glaucescens*  
*Sonchus hydrophilus*  
\* *Sonchus oleraceus*  
\* *Sorghum halepense*  
\* *Sorghum x alnum*  
\* *Spergularia rubra*  
\* *Spergularia salina*  
*Sphaerolobium alatum*  
*Sphaerolobium drummondii*  
*Sphaerolobium grandiflorum*  
*Sphaerolobium linophyllum*  
*Sphaerolobium macranthum*  
*Sphaerolobium medium*  
*Sphaerolobium nudiflorum*  
*Sphaerolobium parviflorum* ms  
*Sphaerolobium scabriusculum*  
*Sphenotoma dracophylloides*  
*Sphenotoma drummondii* R  
*Sphenotoma gracile*  
*Sphenotoma* sp. *Stirling Range* (P.G. Wilson 4235) P3  
*Sphenotoma squarrosum*  
*Spiculaea ciliata*  
\* *Sporobolus indicus* var. *capensis*  
*Sporobolus virginicus*  
*Spyridium majoranifolium*  
*Spyridium majoranifolium* ms  
*Spyridium microcephalum*  
*Spyridium montanum* P2  
*Spyridium mucronatum* subsp. *recurvum* P3  
*Spyridium spadiceum* P2  
*Spyridium villosum* P2  
*Stackhousia scoparia*  
*Stawellia gymnocephala*  
*Stenanthemum emarginatum*  
*Stenanthemum pumilum* P3  
*Stipa hemipogon*  
*Stirlingia anethifolia*  
*Stirlingia latifolia*  
*Stirlingia tenuifolia*  
*Stirlingia teretifolia*  
*Stylidium adnatum*  
*Stylidium amoenum*  
*Stylidium articulatum* P2  
*Stylidium beaughleholei*  
*Stylidium brunonianum*  
*Stylidium brunonianum* subsp. *minor*

*Stylidium carnosum*  
*Stylidium corymbosum*  
*Stylidium corymbosum* var. *corymbosum*  
*Stylidium crassifolium*  
*Stylidium dichotomum*  
*Stylidium fasciculatum*  
*Stylidium guttatum*  
*Stylidium hirsutum*  
*Stylidium imbricatum*  
*Stylidium insensitivum*  
*Stylidium inundatum*  
*Stylidium junceum* subsp. *brevius*  
*Stylidium keigheryi* P2  
*Stylidium lepidum* P3  
*Stylidium leptophyllum*  
*Stylidium luteum*  
*Stylidium perpusillum*  
*Stylidium petiolare*  
*Stylidium piliferum*  
*Stylidium piliferum* subsp. *minor*  
*Stylidium pilosum*  
*Stylidium plantagineum* P4  
*Stylidium preissii*  
*Stylidium repens* var. *diplectroglossum*  
*Stylidium rupestre*  
*Stylidium scandens*  
*Stylidium schoenoides*  
*Stylidium spathulatum* subsp. *glandulosum*  
*Stylidium spinulosum*  
*Stylidium spinulosum* subsp. *montanum*  
*Stylidium squamellosum*  
*Stylidium uniflorum*  
*Stylidium verticillatum* P3  
*Stypantra glauca*  
*Styphelia intertexta*  
*Styphelia tenuiflora*  
*Synaphea favosa*  
*Synaphea media*  
*Synaphea petiolaris*  
*Synaphea petiolaris* subsp. *petiolaris*  
*Synaphea polymorpha*  
*Synaphea preissii* P3  
*Synaphea reticulata*  
*Tegicornia uniflora* P4  
*Templetonia retusa*  
*Templetonia sulcata*  
*Tetraria capillaris*  
*Tetraria octandra*  
*Tetrarrhena laevis*  
*Tetratheca affinis*  
*Tetratheca hirsuta*  
*Tetratheca pubescens*  
*Tetratheca setigera*  
*Tetratheca virgata*  
*Teucrium myriocladum*  
*Thelymitra antennifera*  
*Thelymitra campanulata*  
*Thelymitra canaliculata*  
*Thelymitra cucullata*  
*Thelymitra fuscolutea*  
*Thelymitra macrophylla*  
*Thelymitra nuda*  
*Thelymitra psammophila* R  
*Thelymitra spiralis*  
*Thelymitra villosa*  
*Thomasia angustifolia*  
*Thomasia foliosa*  
*Thomasia grandiflora*  
*Thomasia microphylla*  
*Thomasia pauciflora*  
*Thomasia petalocalyx*  
*Thomasia purpurea*  
*Thomasia rhynchocarpa*  
*Thomasia rugosa*  
*Thomasia sarotes*  
*Thomasia solanacea* P3  
*Thomasia* sp. Toolbrunup(G.J.Keighery 9895) P3  
*Thomasia stelligera*  
*Threlkeldia diffusa*  
*Thryptomene australis*  
*Thryptomene saxicola*  
*Thysanotus anceps* P3  
*Thysanotus brevifolius* P2  
*Thysanotus dichotomus*  
*Thysanotus gageoides* P2  
*Thysanotus glaucifolius*  
*Thysanotus parviflorus* P2  
*Thysanotus patersonii*  
*Thysanotus pauciflorus*  
*Thysanotus pseudojunceus*  
*Thysanotus sparteus*  
*Thysanotus thyrsoides*  
*Thysanotus triandrus*  
*Trachymene croniniana* P2  
*Trachymene cyanopetala*  
*Trachymene ornata*  
*Trachymene pilosa*  
*Trachymene* sp. Walpole(A.S.George 15063)  
*Tribonanthes australis*  
*Tribonanthes longipetala*  
*Trichocline spathulata*  
*Tricoryne humilis*  
*Tricoryne tenella*  
*Tricostularia compressa*  
*Tricostularia neesii* var. *elatior*  
*Tricostularia neesii* var. *neesii*  
\* *Trifolium angustifolium* var. *angustifolium*  
\* *Trifolium arvense* var. *arvense*  
\* *Trifolium campestre* var. *campestre*  
\* *Trifolium dubium*  
\* *Trifolium hirtum*  
\* *Trifolium repens* var. *repens*  
\* *Trifolium subterraneum*  
\* *Trifolium tomentosum* var. *tomentosum*  
*Triglochin centrocarpum*  
*Triglochin lineare*  
*Triglochin minutissimum*  
*Triglochin mucronatum*  
*Tripterococcus brunonis*  
\* *Triticum aestivum*  
*Trymalium elachophyllum*  
*Trymalium floribundum* subsp. *trifidum*  
*Trymalium ledifolium*  
*Trymalium ledifolium* var. *rosmarinifolium*  
\* *Ursinia anthemoides*  
*Utricularia menziesii*  
*Utricularia tenella*  
*Velleia exigua* P2  
*Velleia foliosa* P3  
*Velleia trinervis*  
\* *Vellereophyton dealbatum*  
*Verticordia acerosa* var. *preissii*  
*Verticordia brachypoda*  
*Verticordia brevifolia* subsp. *brevifolia* P1  
*Verticordia brevifolia* subsp. *stirlingensis* P2  
*Verticordia carinata*  
*Verticordia carinata* R  
*Verticordia chrysantha*  
*Verticordia chrysanthella*  
*Verticordia coronata* P3

Verticordia densiflora var. cespitosa  
Verticordia densiflora var. densiflora  
Verticordia endlicheriana var. endlicheriana  
Verticordia endlicheriana var. major  
Verticordia eriocephala  
Verticordia fastigiata  
Verticordia grandiflora  
Verticordia habrantha  
Verticordia harveyi  
Verticordia harveyi R  
Verticordia huegelii var. tridens P1  
Verticordia humilis  
Verticordia insignis subsp. compta  
Verticordia lindleyi subsp. purpurea P4  
Verticordia multiflora subsp. multiflora P4  
Verticordia pennigera  
Verticordia plumosa  
Verticordia plumosa var. brachyphylla  
Verticordia plumosa var. grandiflora  
Verticordia plumosa var. incrassata  
Verticordia plumosa var. plumosa  
Verticordia roei subsp. roei  
Verticordia serrata  
Verticordia serrata var. serrata  
Verticordia sieberi  
Verticordia sieberi var. lomata  
Verticordia subulata  
\* Vicia benghalensis  
Villarsia parnassifolia  
Viminaria juncea  
Vittadinia gracilis  
\* Vulpia bromoides  
\* Vulpia myuros  
Wahlenbergia gracilentia  
Wahlenbergia multicaulis  
Wahlenbergia preissii  
Waitzia acuminata var. acuminata  
Waitzia nitida  
Waitzia suaveolens var. flava  
Waitzia suaveolens var. suaveolens  
Westringia cephalantha  
Westringia rigida  
Wilsonia humilis  
Wurmbea dioica  
Xanthorrhoea preissii  
Xanthosia collina P3  
Xanthosia pusilla  
Xanthosia rotundifolia  
Xanthosia rotundifolia var. hypoleuca P3  
Xanthosia rotundifolia var. rotundifolia  
Xanthosia singuliflora  
Xyris exilis R

R = declared rare plant species  
P = priority plant species  
\* = exotic plant species