

Roadside Vegetation and Conservation Values in the Shire of Koorda



Photo by C. Wilson

August 2007

Roadside Conservation Committee



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Executive Summary

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

Aware of the need to conserve roadside remnants, the Shire of Koorda, the Landcare Coordinator, and local community members liaised with the Roadside Conservation Committee (RCC) in 2003 to survey roadsides in their Shire. Surveys to assess the conservation values of roadside remnants were conducted between March and August 2006 with the help of the NRM facilitator. The majority, 89.5%, of the Shire's 1,085 km of roadsides were assessed by the RCC for their conservation status and maps were produced via a Geographic Information System (GIS). Roadside locations of six nominated weeds and salt affected roadsides were also recorded and mapped onto separate clear overlays. Please note that one of the nominated weeds, Patterson's Curse, was not recorded on roadsides within the Shire, therefore no clear overlay was produced for this weed.

The results of the survey indicated that high conservation value roadsides covered 55% of the roadsides surveyed in the Shire, with medium-high conservation value roadsides accounting for 30%. Medium-low and low conservation value roadsides occupied 8% and 6%, respectively. A more detailed analysis of results is presented in Part C of this report.

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

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

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

PART A

OVERVIEW OF ROADSIDE CONSERVATION

1.0 Why is Roadside Vegetation Important?

Since the settlement of Western Australia by Europeans, large areas of native vegetation in the south west of the state have been cleared for agriculture, roads, settlements, and other development. The fragmentation of the more or less continuous expanse of native vegetation communities by clearing has resulted in the isolation of plant and animal populations. This results in a mosaic of man-made biogeographical islands of small native vegetation remnants.

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



Carnaby's Cockatoo (*Calyptorhynchus latirostris*) has been recorded in the Shire of Koorda.

Photo by M. Thompson, Photo used with the permission of the WA Museum, FaunaBase
(<http://www.museum.wa.gov.au/faunabase.htm>)

Other important values of transport corridor remnants are that they:

- are often the only remaining example of original vegetation within extensively cleared areas;
- often contain rare and endangered plants and animals. Currently, roadside plants represent more than 50% of the known populations of Declared Rare Flora (DRF) and three species are known to exist only in roadside populations;
- provide the basis for our important wildflower tourism industry. The aesthetic appeal of well-maintained roadsides should not be overlooked, they have the potential to improve local tourism and provide a sense of place;
- often contain sites of Aboriginal/European historic or cultural significance;
- provide windbreaks and stock shelter areas for adjoining farmland by helping to stabilise temperature and reduce evaporation;



Flora Roads are high conservation value roadside remnants.

Photo D. Lamont.

- assist with erosion and salinity control, and not only in the land adjoining the road reserve; and
- 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 Department of Environment and Conservation (DEC) permit are required prior to collection. Guidelines for seed and timber harvesting can be found in Appendix 6.

2.0 What are the Threats?

2.1 Lack of Awareness

The general decline of the roadside environment can, in many instances, be attributed to the lack of awareness of the functional and conservation value of the roadside remnants, both by the general community and those who work in the road reserve environment. As a consequence, there is a lack of knowledge of threatening processes (such as road maintenance and inappropriate use of fire) on the sustainability of the roadside reserve as a fauna corridor and habitat area. This situation can therefore act as a catalyst for decline in environmental quality.

2.2 Roadside Clearing

Western Australia's agricultural region, also known as the Intensive Land-use Zone (ILZ), covers an area of approximately 25,091,622 ha, of which only 29.8% is covered by the original native vegetation. Of the 87 rural Local Government Authorities in this zone, 21 carry less than 10% of the original remnant vegetation and a further 30 have less than 30% (Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. 2001).

Inappropriate road management practices, particularly the systematic and indiscriminate clearing of roadside vegetation in some areas, has caused irreversible damage and impacted enormously upon the conservation value of roadsides in Western Australia. Clearing roadside vegetation reduces the viability of the roadside to act as a biological corridor, the diminished habitat width impeding the movement of wildlife throughout the surrounding landscape matrix. Roadside clearing activities have the potential to introduce and spread weeds, due to the movement and disturbance of soil, thus competing with native vegetation residing in the roadside. When coupled with poor site planning and preparation, road construction and maintenance projects can often introduce and spread weeds into previously undisturbed, weed-free roadsides. Roadsides are, in many cases, the only remaining example of remnant vegetation in agricultural areas, yet they are also at great risk due to ongoing inappropriate clearing.

Amendments to the *Environmental Protection Act* 1986 have put in place a permit application process designed to assess vegetation clearing based upon a number of clearing principles which ensure ecological, conservation and land degradation issues are considered. Under the Act, clearing native vegetation requires a permit unless it is for exempt purposes. These amendments are design to provide improved protection for native vegetation, maintain biodiversity and allow for some incidental clearing activities to continue, such as day-to-day farming practices, without the need for a permit.

2.3 Fire

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

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

The RCC's policy on fire management is:

- roadside burning should not take place without the consent of the managing authority;
- Local Government Authorities should adopt by-laws to control roadside burning;
- roadside burning should be planned as part of a total Shire/area Fire Management Plan;
- only one side of a road should be burnt in any one year;
- when designing a Fire Management Plan, the two principles which must be kept in mind are the ecological management of vegetation and the abatement of fire hazard;
- no firebreaks within the road reserve should be permitted unless the width of the roadside vegetation strip is greater than 20m;
- a firebreak on any road reserve should be permitted only when, in the opinion of the road manager, one is necessary for the protection of the roadside vegetation. The road manager shall specify the maximum width to which the break may be constructed; and
- in the case of any dispute concerning roadside fire management, the Fire and Emergency Services Authority (FESA) should be called in to arbitrate.

If a decision is made to use fire, only one side of a road should be burnt at a time, as this will ensure habitat retention for associated fauna and also retention of some of the scenic values associated with the road.

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



Before a decision is made to burn a road verge, the impact on natural, cultural and landscape values should be carefully considered.

Photo D. Lamont

2.4 Weeds

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

Once weeds become established in an area, they become a long-term management issue, costing considerable resources to control or eradicate. The WA Herbarium records 49 weed species in the Shire of Koorda (Appendix 4). The roadside survey recorded populations of six significant weeds, and their locations were mapped by the RCC onto clear overlays. The six nominated weeds were:

- African Lovegrass (*Eragrostis curvula*);
- Caltrop (*Tribulus terrestris*);
- Patterson's Curse (*Echium plantagineum*);
- Saffron Thistle (*Carthamus lanatus*);
- Wild Oats (*Avena fatua*); and
- Wild Radish (*Raphanus raphanistrum*).

Patterson's Curse, however, was not identified along roadsides in the Shire of Koorda and therefore no clear overlay has been produced.



Echium plantagineum

Photos: R. Knox & J. Dodds

Patterson's Curse is a widespread pasture weed that is spread by seed, making roadside populations a priority for control.

Photography by R. Knox and J. Dodds. Photo used with the permission of the WA Herbarium, DEC <http://florabase.calm.wa.gov.au/help/photos#reuse>).



Tribulus terrestris

Photos: S.M. Armstrong, J. Dodd & R. Knox

Caltrop (*Tribulus terrestris*) is a problematic weed found along roadsides in the Shire of Koorda

Photography by S.M. Armstrong, J. Dodd & R. Knox. Photo used with the permission of the WA Herbarium, DEC <http://florabase.calm.wa.gov.au/help/photos#reuse>).

Roadside populations of these weeds can be observed on the weed overlays provided with the Koorda RCV map (2007). The RCV map and weed overlays will assist the Shire and community in planning, budgeting and coordinating strategic weed control projects. Further information on the presence of these nominated weeds is presented in Part C of this report.



Wild Oats is an annual grass like exotic weed species found along roadsides in the Shire of Koorda

Photography by J.D.Dodd. Photo used with the permission of the WA Herbarium, DEC

<http://florabase.calm.wa.gov.au/help/photos#reuse>



Wild Radish can be a common weed in degraded roadsides, and is found throughout Koorda.

Photo by K. Jackson RCC



Carthamus lanatus

Photos: S. Wilkinson & R. Knox

Saffron Thistle (*Carthamus lanatus*) is an annual herb found along the roadside in the Shire of Koorda.

Photography by S.Wilkinson & R.Knox. Photo used with the permission of the WA Herbarium, DEC

<http://florabase.calm.wa.gov.au/help/photos#reuse>



Eragrostis curvula

Photos: J. Dodd, L. Fontanini & R. Randall

African Lovegrass is a perennial herb with an invasive habit found along the roadside in the Shire of Koorda.

Photography by J.D.Dodd, L.Fontanini & R.Randall. Photo used with the permission of the WA Herbarium, DEC

<http://florabase.calm.wa.gov.au/help/photos#reuse>

2.5 Salinity

Salinity is one of the greatest environmental threats facing Western Australia's agricultural areas, with approximately 1.8 million hectares in the South West Agricultural Region already affected to some degree. Dryland salinity has occurred as a consequence of the heavy clearing undertaken in the past, in particular the removal of perennial deep-rooted native vegetation and replacement by shallow rooted annual crop vegetation and the subsequent rising of the water table. The large amount of salt stored within the soil column in these areas of Western Australia is dissolved by the rising water and carried to the surface. Once at the surface, the water evaporates leaving a white film of salt over the landscape, making it unproductive for current agricultural practices and severely impacting upon the remaining native vegetation. Without significant changes to the current land use it has been estimated that approximately 3 million hectares will be affected by salinity by 2010-2015 and 6 million hectares, or 30% of the region, affected by the time a new groundwater equilibrium is reached (Department of Agriculture WA, 2004).

The effect of salinity has not only been restricted to agriculture, it is also having a serious effect on rural town sites and the road network. The National Land and Resources Audit (2002) warned that across Australia some 19,800km of roads, 1,600km of railways and 306 towns are all at a high risk from dryland salinity (Department of Environment and Heritage and the Department of Agriculture, Fisheries and Forestry Australia, 2003). It has also been estimated that more than 4,000km (5%) of roads in the south west land division of Western Australia are at threat of being degraded by the effects of rising water tables and salinity.

Based on figures supplied by the Department of Agriculture WA for the *Salinity Investment Framework Interim Report* (2003), Table 1 shows that in 2003, approximately 7.51% of the 908.40 km of roads assessed, or 112.45 km, in the Shire of Koorda were affected by salinity.

Shire	Total road length assessed (km)	Roads potentially affected by salinity - length in km					
		Highways	Local roads	Main roads	Other roads	Total affected	% of total potentially affected
Mount Marshall	1,312.85		20.35		32.95	53.30	4.06
Dowerin	831.41		39.83	1.75	15.33	56.90	6.84
Koorda	908.40		53.30		14.90	68.20	7.51
Dalwallinu	1,895.68	7.15	114.35	2.65	46.78	170.93	9.02
Wongan-Ballidu	1,396.91		127.10	5.78	42.85	175.73	12.58
Trayning	775.97		34.60	0.28	6.58	41.45	5.34
Wyalkatchem	784.11		24.43	0.23	11.98	36.63	4.67

Table 1. Road lengths potentially affected by salinity in the Shires of Mount Marshall, Dowerin, Koorda, Dalwallinu, Wongan-Ballidu, Trayning and Wyalkatchem.

Adapted from material produced by the Department of Agriculture WA for Department of Environment 2003, Salinity Investment Framework Interim Report - Phase 1, 2003, Department of Environment, Salinity and Land Use Impacts Series No. SLUI 32

Aware of the threat salinity poses to the Shire, the 2006 Koorda roadside survey was designed so that roadside surveyors could record the presence of salt affected roadsides as an additional attribute. The location of salt affected roadsides appears as a clear overlay accompanying the Shire of Koorda RCV map (2007). The data relating to occurrence of salt affected roadsides in Koorda, as observed by the roadside surveyors, is also presented in Part C of this report.

3.0 Legislative Requirements

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

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

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

State legislation:

- *Aboriginal Heritage Act 1972*
- *Agriculture and Related Resources Protection Act 1976*
- *Bush Fires Act 1954*
- *Conservation and Land Management Act 1984*
- *Environmental Protection Act 1986*
- *Heritage of WA Act 1990*
- *Land Act 1933*
- *Local Government Act 1995*
- *Main Roads Act 1930*
- *Mining Act 1978*
- *Soil and Land Conservation Act 1945*
- *State Energy Commission Supply Act 1979*
- *Water Authority Act 1987*
- *Wildlife Conservation Act 1950,1979*

Commonwealth legislation:

- *Environment Protection and Biodiversity Conservation Act 1999*

New legalisation has been introduced under the *Environmental Protection Act 1986* which specify that all clearing of native vegetation require a permit, unless it is for an exempt purpose. The *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* provide an outline of these exemptions. Clearing applications are assessed against twelve clearing principles, which look at values such as the:

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

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

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

4.0 Environmentally Sensitive Areas

An Environmentally Sensitive Area (ESA) is an area that requires special protection for at least one of the following reasons:

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

ESAs can be delineated by the use of site markers. Please see the RCC publication *Guidelines for Managing Special Environmental Areas in Transport Corridors* for design and placement of ESA markers. Markers of a uniform shape and colour will make recognition easier for other authorities using road reserves. Workers who come across an 'Environmentally Sensitive Area' marker in the field should not disturb the area between the markers unless specifically instructed. If in doubt, the Works Supervisor, Shire Engineer or CEO should be contacted. Western Power and WestNet Rail also have systems for marking sites near power or rail lines.

To ensure that knowledge of rare flora and other sites does not get lost due, perhaps, to staff changes, the Local Authority should establish an *Environmentally Sensitive Area Register*. This should outline any special treatment that the site should receive and the specific person who should be consulted prior to any work being initiated in the area.

Local Government is encouraged to permanently mark ESAs to prevent inadvertent or inappropriate damage to Declared Rare Flora (DRF) or other values being protected.



Roadside ESA markers are highly visible.

Photo by K. Jackson

5.0 Flora Roads

A Flora Road is one which has special conservation value because of the vegetation contained within the road reserve. The managing authority may decide to declare a Flora Road based on the results of the survey of roadside conservation value. The RCC has prepared *Guidelines for the Nomination and Management of Flora Roads* (Appendix 7). The Flora Road signs (provided by the RCC) draw the attention of both the tourist and those working in the road reserve to the roadside flora, indicating that it is special and worthy of protection. The program seeks to raise the profile of roadsides within both the community and road management authorities.

Although presently there are no Flora Roads designated within the Shire of Koorda, the roadside survey and the RCV map highlighted a number of roadsides that have the potential to be declared as Flora Roads. These, and other roads, may be investigated further to see if they warrant a declaration as a Flora Road (See Part C of this report).

In order to plan roadworks so that important areas of roadside vegetation are not disturbed, road managers should be aware of these areas. To ensure this is not overlooked it is suggested that areas declared as Flora Roads be included in the Shire's *Environmentally Sensitive Area Register*.

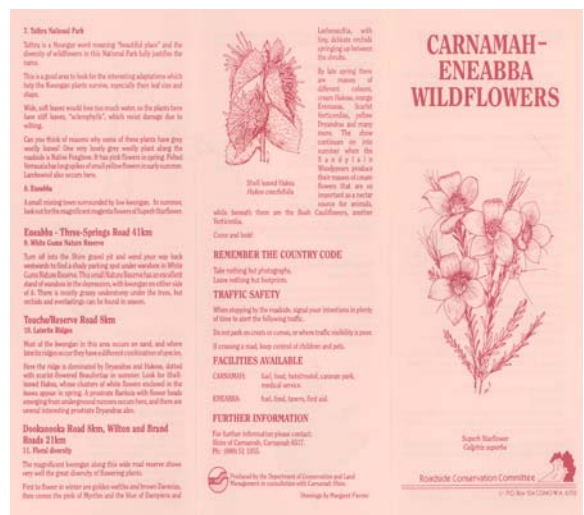
Attractive roadside are an important focus in Western Australia, the "Wildflower State". Declared Flora Roads will by their very nature be attractive to tourists and would often be suitable as part of a tourist drive network. Consideration should be given to:

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

Right: The RCC has assisted local communities to produce wildflower drive pamphlets.



Roadsides are one of the most accessible places for tourists to view wildflowers.
Photo by DEC



PART B

The Natural Environment in Koorda

1.0 Flora

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

The WA Herbarium lists over 500 species of plants present in the Shire of Koorda. The most prolific genera are *Acacia* 57 spp, *Eucalyptus* 32 spp, *Melaleuca* 22 spp, *Grevillea* 21 spp, and *Verticordia* 13 spp. The complete list of recorded flora can be seen in Appendix 4 of this report.



Grevillea teretifolia

Photos: H. Adamson & M. Kealley

Round leaf Grevillea (*Grevillea teretifolia*), a native plant of the roadside flora in the Shire of Koorda.

Photography by H. Adamson, and M Kealley. Photo used with the permission of the WA Herbarium, DEC

<http://florabase.calm.wa.gov.au/help/photos#reuse>

2.0 Declared Rare Flora

Declared Rare Flora (DRF) species, or populations, are of great conservation significance and should therefore be treated with special care when road and utility service, construction or maintenance is undertaken. Populations of DRF along roadsides are designated Environmentally Sensitive Areas (ESAs) and are delineated by yellow stakes with an identification plate welded on. The RCC suggests using the RCC publication *Guidelines for Managing Special Environment Areas in Transport Corridors* as a guideline for managing these sites. It is the responsibility of the road manager to ensure these markers are installed, and guides for this are available from the RCC. For information regarding DRF, contact the Department of Environment and Conservation Flora Officer for the Avon-Mortlock District. If roadworks are to be carried out near DRF sites, it is advisable to contact the Department of Environment and Conservation at least six weeks in advance.

Currently (as at August 2005), 3 locations of Declared Rare and Priority Flora are known to occur within roadsides in the Shire of Koorda. All of these sites are road verges vested in the Shire. In total, there are two species of declared rare and priority flora on roadsides in the Shire, these are:

- *Eucalyptus synandra*; and
- *Eromophila resinosa*.



Declared Rare Flora (DRF) sites should be clearly marked with these yellow posts.

Photo K. Jackson.

This information may have changed since the time of this report's release; therefore it is important to contact the relevant Department of Environment and Conservation District office, or the Species and Communities Branch in Kensington for the most recent information.

3.0 Fauna

The Western Australian Museum records approximately 58 species of fauna from the Koorda area (Appendix 5). WA Museum fauna records comprise specimen records, museum collections and observations from 1850 to present; therefore it is intended to act only as a general representation of the fauna in the area. Of the fauna species recorded in the Koorda area, there were 15 bird, 1 amphibia, 9 mammal, 1 fish and 32 reptile species.



Eucalyptus synandra Photos: P. Roberts, S.D. Hopper & S.J. Patrick

Jingymia Mallee (*Eucalyptus synandra*), Declared rare flora found on the roadside in the Shire of Koorda, status vulnerable. Flowers from December to March, soil disturbance, weed invasion and grazing are thought to affect survival.

Photography by P.Roberts, S.D. Hopper & S.J. Patrick. Photo used with the permission of the WA Herbarium, DEC <http://florabase.calm.wa.gov.au/help/photos#reuse>

The *Wildlife Conservation Act* 1950 provides for native fauna (and flora) to be specially protected where they are under identifiable threat of extinction, and as such, are considered to be "threatened". Based on distributional data from the Department of Environment and Conservation, 9 species of threatened and priority fauna have been recorded or sighted throughout the Shire of Koorda, and these are listed below.

- **Chuditch (*Dasyurus geoffroi*)**

This carnivorous marsupial occupies large home ranges, is highly mobile and appears able to utilise bush remnants and corridors.

- **White-browed Babbler (*Pomatostomus superciliosus ashbyi*)**

This species of bird lives in eucalypt forests and woodlands, and forages on or near the ground for insects and seeds.

- **Malleefowl (*Leipoa ocellata*)**

This species was once widely distributed across southern Australia. It prefers woodland or shrubland with an abundant litter layer that provides essential material for the construction of its nest mound.

- **Peregrine Falcon (*Falco peregrinus*)**

This species is uncommon and prefers areas with rocky ledges, cliffs, watercourses, open woodland or margins with cleared land.

- **Parartemia contracta (*Parartemia contracta*)**

This species of crustacean has been recorded from Lake



The Malleefowl (above) is a vulnerable species that relies on remnant bushland for its survival.

Photo by M.J. Bamford, Photo used with the permission of the WA Museum, FaunaBase <http://www.museum.wa.gov.au/faunabase.htm>.

O'Grady as well as another site near Wyalkatchem. Little is known of its biology.

- **Rufous Fieldwren (*Calamanthus campestris montanellus*)**

This species lives in low, sparse heath, saltmarsh or samphire, with or without emergent trees.

- **Shield-backed Trapdoor Spider (*Idiosoma nigrum*)**

This species is in decline in its patchy distribution through the northern and central wheatbelt and coastal plain. It is a long-lived species that is very sensitive to disturbance.

- **Tree-stem Trapdoor Spider (*Aganippe castellum*)**

This species lives in summer dry boggs prone to irregular flooding and builds a characteristic burrow entrance against a tree stem.

- **Western Spiny-tailed Skink (*Egernia stokesii badia*)**

This species occurs in semi-arid scrub and woodlands of Shark Bay and the northern wheatbelt, sheltering in hollow logs and behind bark of fallen trees.

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

4.0 Remnant Vegetation Cover

Only 8.1% of the original native vegetation remains in the Shire of Koorda and this is located in a variety of tenures from nature reserves to privately owned land. The *National Objectives and Targets for Biodiversity Conservation 2001-2005* (Environment Australia, 2001) stated that vegetation types represented by less than 30% are considered ecologically endangered and in need of protection and restoration wherever they are located. The remaining 8.1% of vegetation in the Shire of Koorda can easily be further depleted if proactive measures are not taken to manage this priceless resource.

Shire	Total Area (ha)	Area inside Clearing Line (ha)	Vegetation Cover Remaining (inside clearing line)	
			(ha)	(%)
Mt Marshall	1,019,574	444,185	47,071	10.6
Dowerin	188,786	188,786	8,055	4.3
Koorda	283,746	266,057	21,537	8.1
Dalwallinu	723,681	595,418	72,228	12.0
Wongan-Ballidu	333,908	333,908	17,454	5.2
Trayning	164,255	164,255	13,811	8.4
Wyalkatchem	158004*	158,004	7,814	4.9

Table 2. Remnant vegetation remaining in agricultural areas of Koorda and surrounding Shires. * Public Land includes Salt Lakes and Saline Flats which are not included in the total Vegetation cover at 1995/96 (Shepherd, Beeston and Hopkins, 2001).

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



Tree hollows are of vital importance to breeding birds.

Photo by L. McMahon, Birds Australia

PART C

ROADSIDE

SURVEYS IN THE

SHIRE OF KOORDA

1.0 Introduction

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

The majority (975.7 km, or 89.9%) of the Shire of Koorda's 1,085 km of roads were surveyed and then assessed to determine the conservation status of the road reserves. Fieldwork was carried out from the 31st March to the 1st August 2006. The enthusiastic efforts of the volunteer roadside surveyors, Natural Resource Management Facilitator Hannah Sadler and the support provided by Council and Shire staff ensured that this project was successfully completed.

1.1 Methods


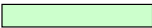

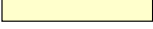
Roadside surveys were undertaken in a vehicle, with two people per vehicle. The passenger recorded all the roadside survey data using the RCC's iPAQ personal computers. At the end of the survey, the iPAQs were sent back to the RCC for analysis and mapping.

The methods to assess and calculate the conservation value of the roadside reserves are described in *Assessing Roadsides: A Guide for Rating Conservation Value* (Jackson, 2002). 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 the standard survey sheet (Appendix 1) (no longer in use). This provides both a convenient and uniform method of scoring.

The following 6 attributes were used to produce a quantitative measure of conservation value:

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

Each of these 6 attributes was given a score ranging from 0 to 2 points. Their combined scores provided a conservation value score ranging from 0 to 12. The conservation values, in the form of conservation status categories, are represented on the RCV map 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 

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;
- general comments;
- presence of 6 nominated weeds; and
- presence of salt affected roadside.

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

1.2 Mapping Roadside Conservation Values

The RCC produced a computer-generated map (using a Geographic Information System, or GIS), at a scale of 1:100,000 for the Shire of Koorda. Known as the Roadside Conservation Value (RCV) map, it depicts the conservation status of the roadside vegetation and the width of the road reserves within the Shire of Koorda. The data used to produce both the map and the following figures and tables are presented in Appendix 2. Road name and length information can be found in Appendix 3.

The digital information used for the map was obtained from the Department of Environment and Conservation, Main Roads WA and the Department of Agriculture WA. Remnant vegetation on both the Crown estate and privately owned land and watercourses are also depicted on the RCV map.

1.3 Roadside Conservation Value Categories

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

- intact natural structure consisting of a number of layers, i.e. ground, shrub, tree layers;
- extent of native vegetation greater than 80%, i.e. little or no disturbance;
- high diversity of native flora, i.e. greater than 20 different species;
- few weeds, i.e. less than 20% of the total plants; and
- high value as a biological corridor i.e. may connect uncleared areas, contain flowering shrubs, tree hollows, and/or hollow logs for habitat.



This high conservation value roadside in Wongan-Ballidu contains relatively intact, undisturbed and diverse remnant vegetation.

Photo K. Jackson.

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

- generally intact natural structure, with one layer disturbed or absent;
- extent of native vegetation between 20-80%;
- medium to high diversity of native flora, i.e. 6-19 species;
- few to half weeds i.e. between 20-80% of the total plants; and
- medium to high value as a biological corridor.



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

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

- natural structure disturbed, i.e. one or more vegetation layers absent;
- extent of native vegetation between 20-80%;
- medium to low diversity of native flora, i.e. 0-5 different species;
- half to mostly weeds, i.e. between 20-80% of total plants; and
- medium to low value as a biological corridor.



Medium-low conservation value roadsides may contain Declared Rare Flora (DRF).
Photo by RCC

Low Conservation Value roadsides are those with a score between 0 and 4, and generally have the following characteristics:

- no natural structure i.e. two or more vegetation layers absent;
- low extent of native vegetation, i.e. less than 20%;
- low diversity of native flora, i.e. 0-5 different species;
- mostly weeds, i.e. more than 80% of total plants, or ground layer totally weeds; and
- low value as a biological corridor.

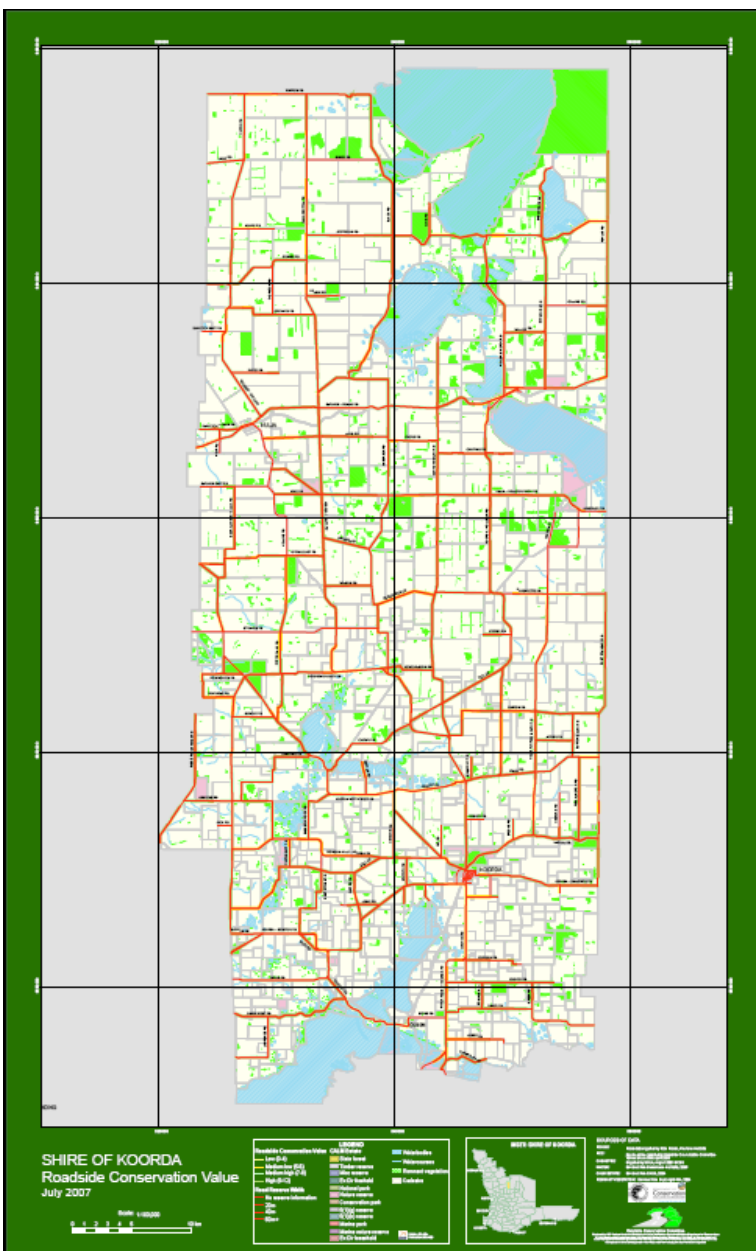


Low conservation value roadsides are typically dominated by weeds and have little or no native vegetation.
Photo by K. Jackson.

2.0 USING THE ROADSIDE CONSERVATION VALUE (RCV) MAP

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

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



The map can also be used as a reference to overlay transparencies of other information relevant to roadside conservation. This enables the roadside vegetation to be assessed in the context of its importance to the Shire's overall conservation network. To further assist in roadside management the Shire could produce other overlays such as the degree of weed infestation, locations of Environmentally Sensitive Areas or future planned developments.

The RCV map depicts roadside conservation values in the Shire of Koorda.

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

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



Weed control along a roadside.
Photo MRWA



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



The road manager can declare high conservation value roads as Flora Roads.
Photo by D. Lamont.



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

3.0 RESULTS

Using the information collected by the roadside survey, totals of the attributes used to calculate roadside conservation values in the Shire of Koorda are presented (Table 3). The survey data has 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. As roadsides occur on both sides of the road, roadside distances (km) are equal to *twice* the actual distance of road travelled.

Summary Information: Shire of Koorda 2006					
Length of roadsides surveyed: 1951.4 km (975.8 km of road)					
<u>Roadside Conservation Status</u>			<u>Roadside Conservation Values</u>		
	Total (km)	(%)	Score	Total (km)	(%)
High (9-12)	1079.9	55.3	0	0.0	0.0
Medium-high (7-8)	593.3	30.4	1	0.7	0.0
Medium-low (5-6)	161.6	8.3	2	7.3	0.4
Low (0-4)	116.7	6.0	3	30.3	1.6
			4	78.5	4.0
Total	1951.5	100.0	5	63.3	3.2
			6	98.3	5.0
			7	164.6	8.4
<u>Native Vegetation in Roadsides</u>			8	428.6	22.0
	Total (km)	(%)	9	498.2	25.5
2-3 vegetation layers	1509.9	77.4	10	390.1	20.0
1 vegetation layer	411.7	21.1	11	163.1	8.4
0 vegetation layers	29.8	1.5	12	28.4	1.5
Total	1951.4	100.0			
			Total	1951.5	100.0
<u>Number of Native Plant Species</u>			<u>Width of Vegetated Roadside</u>		
	Total (km)	(%)		Total (km)	(%)
Over 20 species	441.8	22.6	1 to 5 m	1243.4	63.7
6 to 19 species	1210.4	62.0	5 to 20 m	436.8	22.4
0 to 5 species	299.2	15.3	Over 20 m	109.6	5.6
Total	1951.4	100.0	Unknown	161.6	8.3
			Total	1951.5	100.0
<u>Predominant Adjoining Land Use</u>			<u>Extent of Native Vegetation</u>		
	Total (km)	(%)		Total (km)	(%)
Agricultural: completely cleared	1492.9	76.5	Over 80%	591.7	30.3
Agricultural: scattered vegetation	228.9	11.7	20% to 80%	1086.0	55.6
Uncleared native vegetation	121.1	6.2	Less than 20%	273.8	14.0
Drain	0.0	0.0	Total	1951.5	100.0
Plantation of non-natives	2.0	0.1			
Railway	25.7	1.3	<u>Value as a Biological Corridor</u>		
Urban or Industrial	1.2	0.1		Total (km)	(%)
Other	79.6	4.1	High	533.8	27.4
Total	1951.4	100.0	Medium	1014.5	52.0
			Low	403.1	20.7
			Total	1951.4	100.0
<u>Weed Infestation</u>					
	Total (km)	(%)			
Light <20% weeds	1485.4	76.1			
Medium 20-80% weeds	349.2	17.9			
Heavy >80% weeds	116.8	6.0			
Total	1951.4	100.0			

Roadside surveys were carried out in Koorda Shire from 31st March to 1st August 2006

Table 3. Summary of results from the roadside survey in the Shire of Koorda.

Width of Road Reserve

The width of road reserves in the Shire of Koorda was recorded in increments of 20 metres (Table 4). The majority of road reserves were 20 metres in width, with 859.7 km (88.1%) of roads falling into this category. Of the remaining roads 25.9 km (2.7%) were 40 metres in width, 14.5 km (1.5%) were less than 20m wide, 6.9 km (0.7%) were 60m wide, and 4.2 km (0.4%) of roadsides were 100m wide. The width of the road reserve for 64.6 km (6.6%) of roads surveyed was unknown.

Width of Road Reserve - Koorda		
	Total km	%
<20m	14.5	1.5
20m	859.7	88.1
40m	25.9	2.7
60m	6.9	0.7
100m	4.2	0.4
Unknown	64.6	6.6
Total	975.7	100.0

Table 4. Width of road reserves in the Shire of Koorda.

Width of Vegetated Road Reserve

The width of vegetated roadside was recorded by selecting one of three categories, 1-5 metres, 5-20 metres or over 20 metres in width. The left and right hand sides were recorded independently, and then combined to establish the total figures (Table 5). The majority of roadside vegetation, 1,243.4 km (63.7%), was between 1 and 5 metres in width, followed by 436.8 km (22.4%) of roadsides where the vegetation fell between 5 and 20 metres in width. Roadside vegetation over 20 metres in width spanned 109.6 km (5.6%) of the roadsides surveyed, whilst the width was unknown for 161.6 km (8.3%) of the roadsides surveyed.

Width of Vegetated Roadside - Koorda		
	Total km	%
1-5m	1243.4	63.7
5-20m	436.8	22.4
>20m	109.6	5.6
Unknown	161.6	8.3
Total	1951.5	100.0

Table 5. Width of vegetation on roadsides in the Shire of Koorda.

Native Vegetation Layers on Roadsides

The number of native vegetation layers present, i.e. tree, shrub and/or ground layer, determined the 'native vegetation on roadside' value. Sections with two to three layers of native vegetation covered 77.4% (1509.9 km) of roadsides, 21.1% (411.7 km) had only one layer and 1.5% (29.8 km) had no layers of native vegetation (Table 3 and Figure 1).

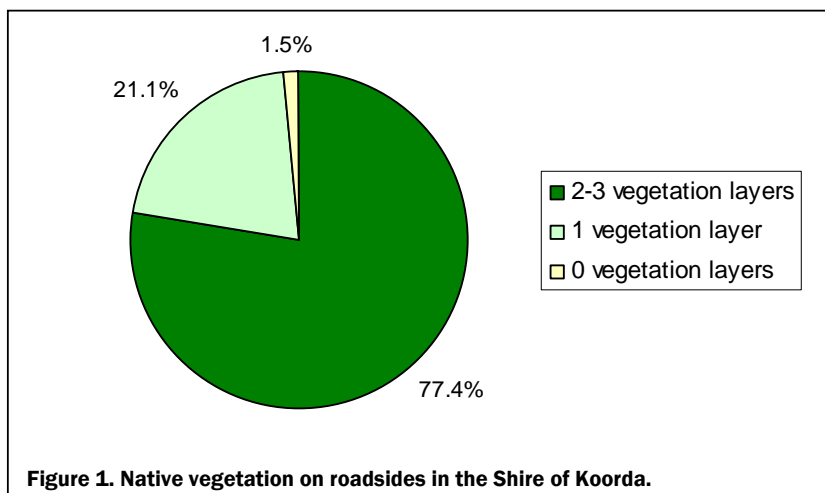
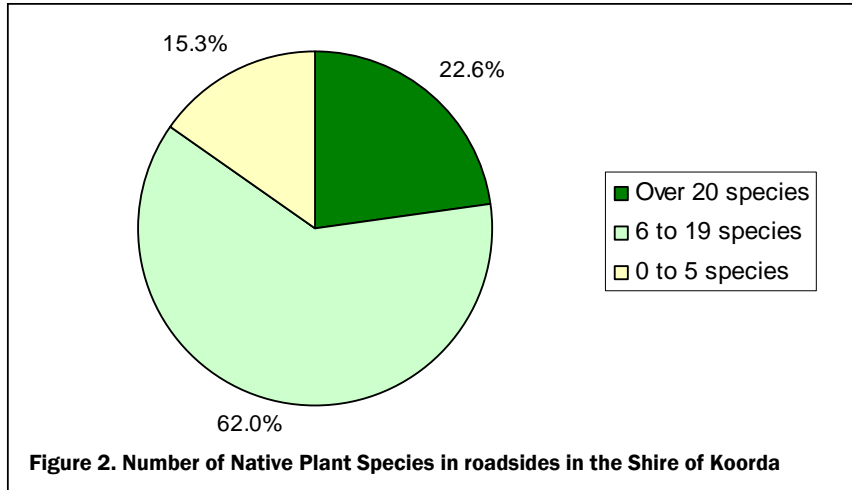


Figure 1. Native vegetation on roadsides in the Shire of Koorda.

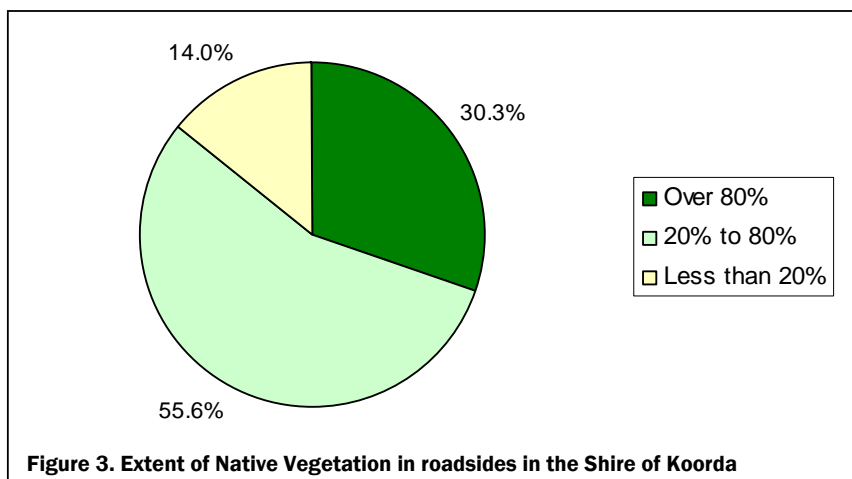
Number of Native Plant Species

The 'number of native plant species' score provided a measure of the diversity of the roadside vegetation. Survey sections with more than 20 plant species spanned 22.6% (441.8 km) of the roadsides surveyed. Roadside sections with 6 to 19 plant species accounted for 62.0% (1,210.4 km) of the roadside. The remaining 15.3% (299.2 km) contained less than 5 plant species (Table 3 and Figure 2).



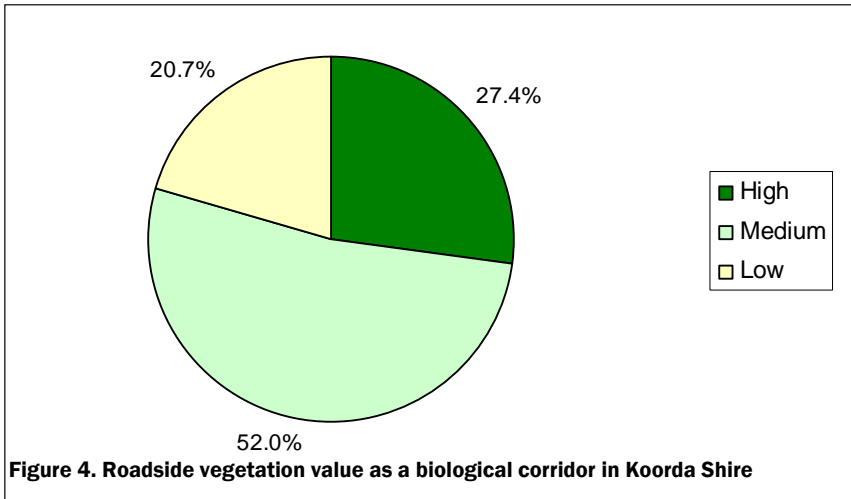
Extent of Native Vegetation

The 'extent of native vegetation' cover refers to the continuity of the roadside vegetation and takes into account the presence of disturbances such as weeds. Roadsides with extensive vegetation cover, i.e. greater than 80%, occurred along 30.3% (591.7 km) of the roadsides surveyed. Survey sections with medium, i.e. 20% to 80%, vegetation cover accounted for 55.6% (1086.0 km) of the roadsides. The remaining 14.0% (273.8 km) had less than 20% native vegetation and therefore, a low 'extent of native vegetation' value (Table 3 and Figure 3).



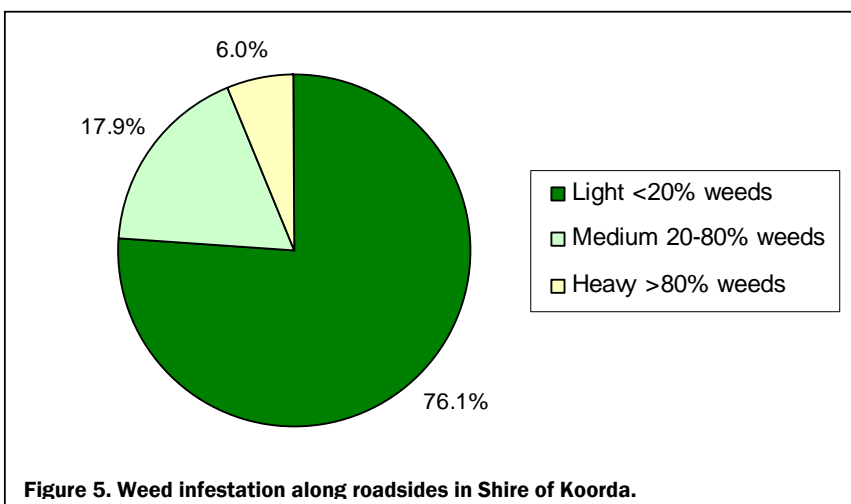
Value as a Biological Corridor

This characteristic considered the presence of four attributes: connection to uncleared areas; presence of flowering shrubs; large trees with hollows; and hollow logs. Roadsides determined to have high value as a biological corridor were present along 27.4% (533.8 km) of the roadsides surveyed. Roadsides with medium value as biological corridors made up 52.0% (1,014.5 km), and roadsides with low value as a biological corridor occurred along 20.7% (403.1 km) of the roadsides surveyed (Table 3 and Figure 4).



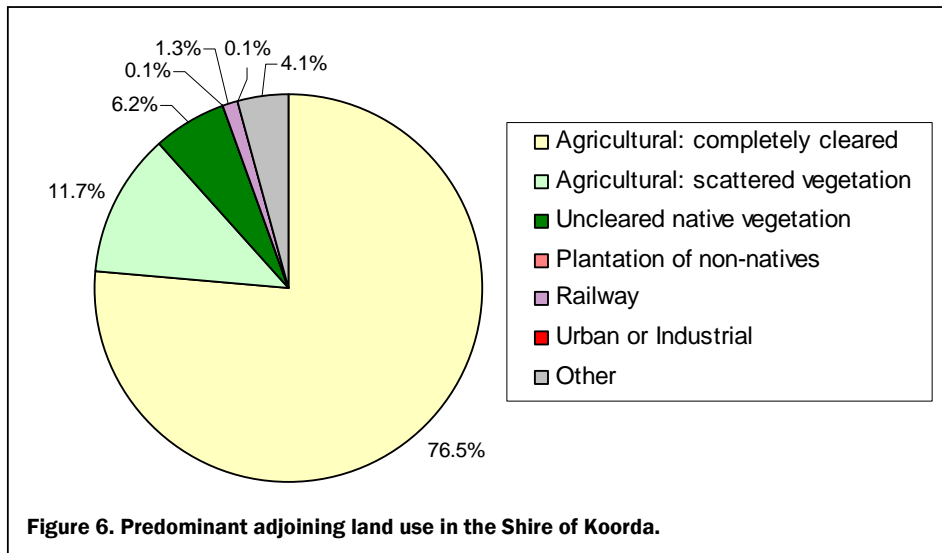
Weed Infestation

Light levels of weed infestation (weeds less than 20% of total plants), were recorded on 76.1% (1,485.4 km) of the roadsides surveyed, medium level weed infestation (weeds 20-80% of the total plants) occurred on 17.9% (349.2 km) of the roadsides and 6.0% of roadsides (116.8 km) were heavily infested with weeds (weeds more than 80% of the total plants) (Table 3 and Figure 5).



Predominant Adjoining Land Use

Uncleared native vegetation was present on 6.2% (121.1 km) of the land adjoining roadsides, whilst 76.5% (1,492.9 km) of roadsides adjoined land that had been completely cleared for agriculture. 11.7% (228.9 km) of the roadsides bordered land that contained a scattered distribution of native vegetation. Plantation of non-native trees was the adjoining land use for 0.1% (2.0 km) of roadsides, and urban or industrial land uses accounted for 0.1% (1.2km) of land bordering roadsides. Railway reserves were the adjoining land use for 1.3% (25.7 km) of the roadsides surveyed and 'other' land uses adjoined 4.1% (79.6 km) of the roadsides surveyed (Table 3 and Figure 6).



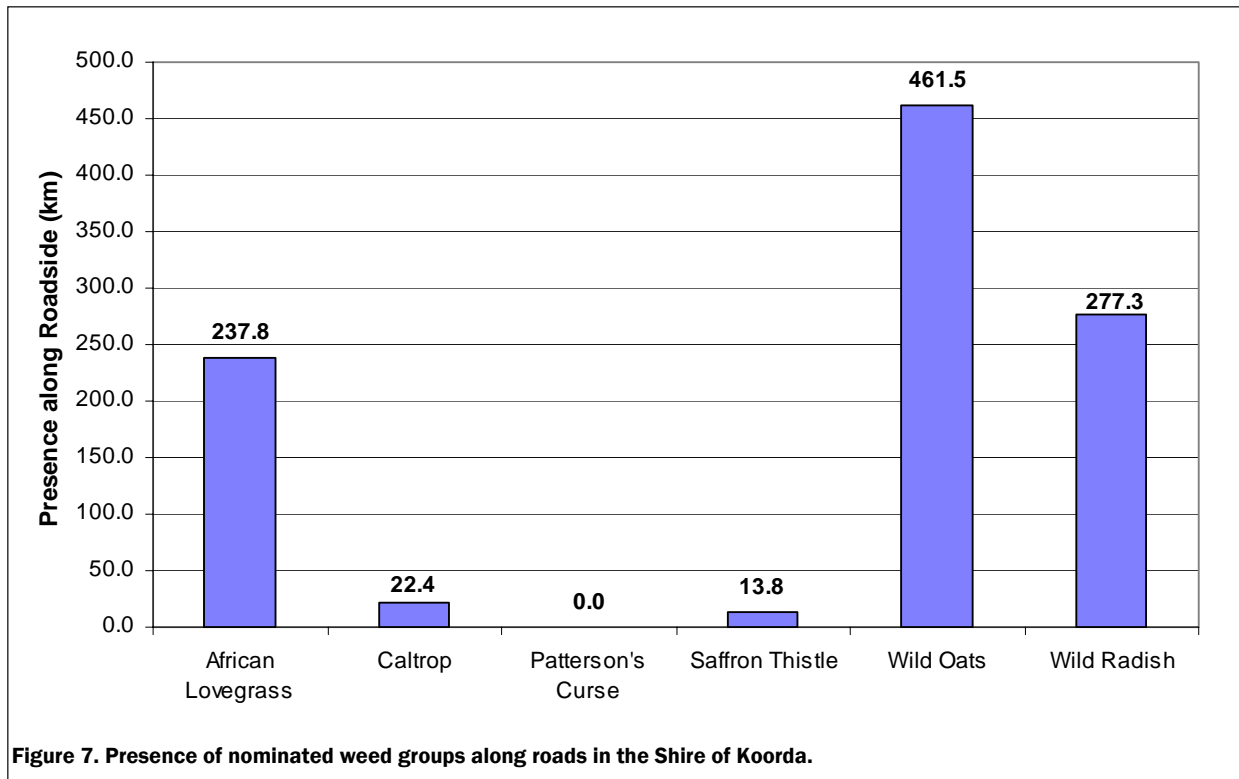
Nominated Weeds

The following weeds/ weed groups are depicted on clear overlays accompanying the 2007 RCV map:

- African Lovegrass (*Eragrostis curvula*);
- Caltrop (*Tribulus terrestris*);
- Saffron Thistle (*Carthamus lanatus*);
- Wild Oats (*Avena fatua*); and
- Wild Radish (*Raphanus raphanistrum*).

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

Of the nominated weeds species surveys Wild Oats was the most prevalent, recorded along 461.5 km (23.7%) of roads surveyed. Wild Radish was also quite prevalent, recorded along 277.3 km (14.2%) of roads. African Lovegrass was the next most commonly recorded weed, occurring along 237.8 km (12.2 %) of roads, followed by Caltrop, recorded along 22.4 km (1.1%), and then Saffron Thistle, which was recorded along 13.8 km (0.7%) of roadsides. Patterson's Curse was not recorded along any of the roads surveyed (Figure 7).



Salinity

The presence of salinity in roadsides was recorded throughout the survey and these locations are depicted on a separate clear overlay accompanying the 2007 RCV map. The surveyors determined the level of salt damage occurring in roadsides, and there were 4 categories to choose from:

- no visible salt damage (0% of roadside affected)
- minor salt damage (<20% of roadside salt affected);
- moderate salt damage (20-80% of roadside salt affected); or
- major salt damage (>80% of roadside salt affected).

Of the 1,951.4 km of roadsides surveyed, 81.8% (1,596.0 km) of roadsides had no visible salt damage (0% salt affected) and 7.7% (150.3 km) had minor salt damage (<20% salt affected). 6.2% (120.1 km) of roadsides were moderately affected by salt (20-80% salt affected) and 4.4% (85.0 km) were heavily affected by salt (>80%) (Figure 8). In summary, 355.5 km of roads are now affected by salt to some degree.

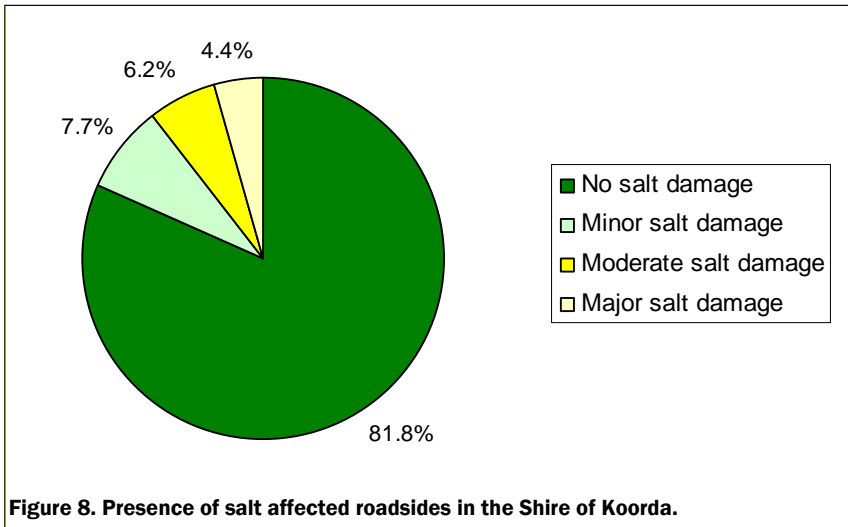


Figure 8. Presence of salt affected roadsides in the Shire of Koorda.

Conservation Value Scores

Conservation value scores were calculated for each section of roadside surveyed. Scores range from 0 to 12, from lowest to highest conservation value respectively (Figure 9). The majority of the roadsides were of a high to medium high conservation value, with a score of 9 being attributed to 25.5% (498.2 km) of roadsides, a score of 8 credited to 22.0% (428.6 km) of roadsides, a score of 10 to 20.0% (390.1 km) of roadsides, a score of 7 to 8.4% (164.6 km) of roadsides and 8.4% (163.1 km) of roadsides received a score of 11. 98.3 km (5.0%) scored a roadside conservation value of 6, 78.5 km (4.0%) scored 4, and 63.3 km (3.2%) scored 5. Of the roads remaining, 30.3 km (1.6%) received a score of 3, only 28.4 km (1.5%) was credited with a score of 12, 7.3 km (0.4%) received a score of 2, and 0.7 km (0.0%) received a score of 1. No roadsides received a conservation value score of 0.

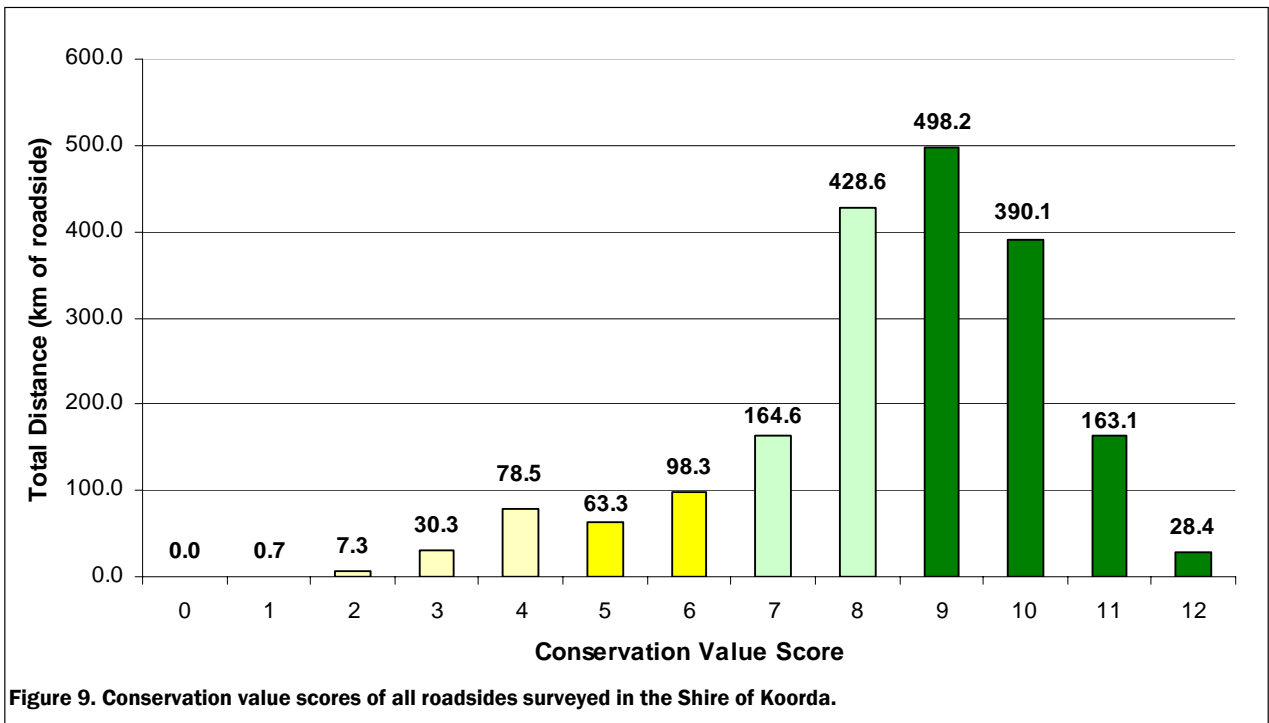
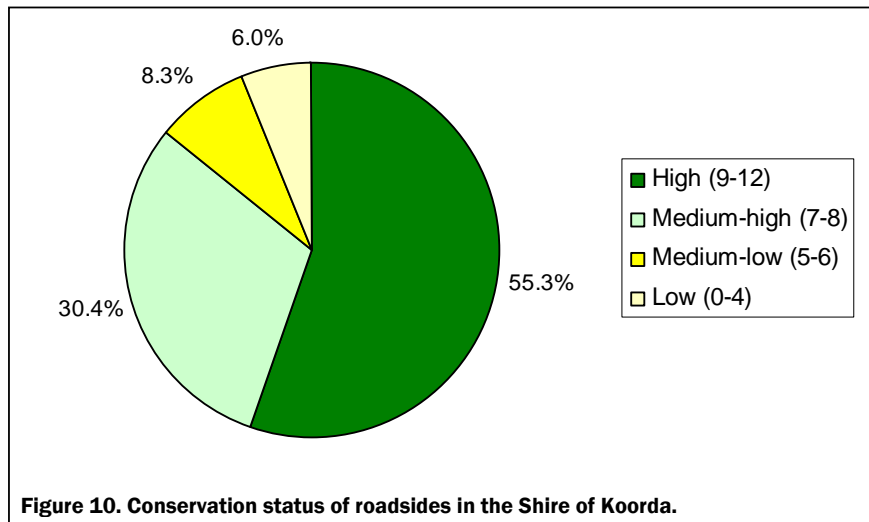


Figure 9. Conservation value scores of all roadsides surveyed in the Shire of Koorda.

Conservation Status

The conservation status category indicated the combined conservation value of roadsides surveyed in the Shire of Koorda. Roadside sections of high conservation value (9-12) covered 55.3% (1,079.9 km) of the length of roadsides surveyed. Medium-high conservation value (7-8) roadsides accounted for 30.4% (593.3 km) of the total surveyed. Medium-low conservation (5-6) roadside covered 8.3% (161.6 km) of the total surveyed. Roadsides of low conservation value (0-4) occupied 6.0% (116.7 km) of the roadsides surveyed (Table 3 and Figure 10).



Flora Roads

A Flora Road is one which has special conservation value because of the vegetation contained within the road reserve. The RCC has prepared *Guidelines for the Nomination and Management of Flora Roads* (Appendix 7).

Although presently there are no Flora Roads declared within the Shire of Koorda, the roadside survey and the RCV map highlighted a number of roadsides that have the potential to be declared as Flora Roads.

Roadsides, or large sections of roadsides, determined as having high conservation value around the Shire of Koorda include:

- Sandphire Road
- Koorda – Kulja Road
- Kulja – Mollerin Road
- Jameson Road
- Commonwealth Road
- Watt Road
- Remlap Road
- Koorda – Mollerin Road
- Wilson Road
- East Boundary Road
- Aitken Road
- Narkal North Road
- Griffith Road
- Best Road
- Leeke Road
- Dowerin – Koorda Road
- Dukin West Road



Flora Road nominations are assessed by the RCC.

Photo D Lamont.

PART D

ROADSIDE

MANAGEMENT

RECOMMENDATIONS

1.0 Management Recommendations

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

The Executive Officer of the RCC is also available to provide assistance on all roadside conservation matters, and can be contacted on (08) 9423 2423. The following RCC publications provide guidelines and management recommendations that will assist Local Government Authorities:

- *Handbook of Environmental Practice for Road Construction and Maintenance Works*; and
- *Guidelines for Managing Special Environmental Areas in Transport Corridors*.

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

This can be achieved by:

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

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

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

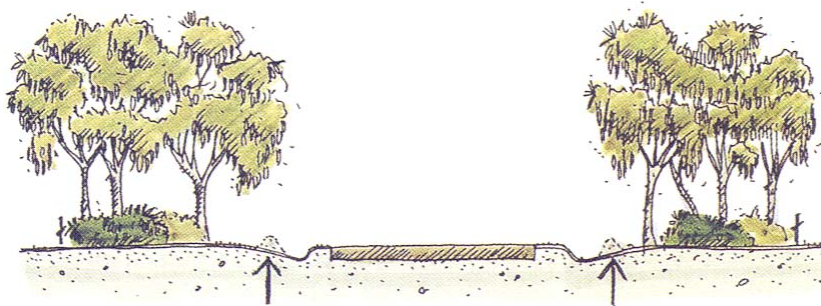
1.3 Improve roadside sections of medium to low conservation value by:

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

2.0 Minimising Disturbance

Minimal disturbance can be achieved by:

- adopting a road design that occupies the minimum space;
- diverting the line of a table drain to avoid disturbing valuable flora;
- pruning branches, rather than removing the whole tree or shrub;
- not dumping spoil on areas of native flora;
- applying the Fire Threat Assessment (see RCC Roadside Manual) 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;
- encouraging adjacent landholders to set back fences to allow roadside vegetation to proliferate;
- encouraging adjacent landholders to plant windbreaks or farm tree lots adjacent to roadside vegetation to create a denser windbreak or shelterbelt; and
- encouraging revegetation projects by adjacent landholders.

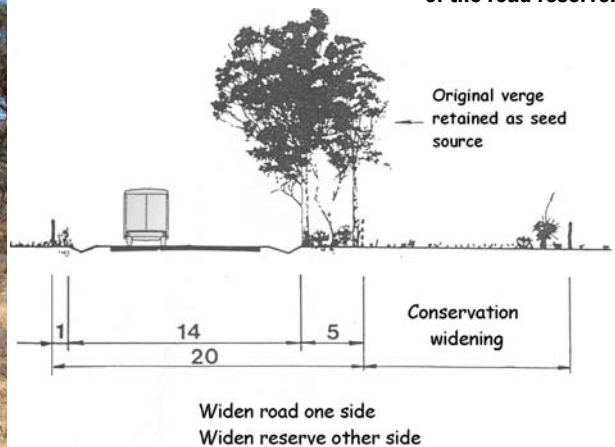


Avoid windrowing drain material into vegetation



Above: A high value road reserve in Tammin. The road was built on adjoining farmland in order to retain the important remnant bushland existing in the undeveloped road reserve.

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



3.0 Planning for Roadsides

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

The following actions greatly enhance 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; and
- 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. The RCC can provide this training.

Training develops recognition and understanding of roadside values and highlights best work practices. Workshops are developed to ensure that local issues and environments are dealt with and they include site visits to high conservation remnants, current projects and works. For training enquiries please contact the RCC Executive Officer (08) 9423 2423.

4.0 Setting Objectives

The objective of all roadside management should be to:

- **Protect**
 - native vegetation
 - rare or threatened flora and fauna
 - cultural and heritage values
 - community assets from fire
- **Maintain**
 - safe function of the road
 - native vegetation communities
 - fauna habitats and corridors
 - visual amenity and landscape qualities
 - water quality
- **Minimise**
 - land degradation
 - spread of weeds and vermin
 - spread of soil borne pathogens
 - risk and impact of fire
 - disturbance during installation and maintenance of service assets
- **Enhance**
 - indigenous vegetation communities
 - fauna habitats and corridors

References

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Appendix

1



SURVEY TO DETERMINE THE CONSERVATION VALUE OF ROADSIDES IN THE
SHIRE OF _____

Roadside Conservation Committee
 C/- Locked Bag 104
 Bentley Delivery Centre WA 6983

Phone: (08) 9334 0423
 Fax: (08) 9334 0199

Date _____
 Observer(s) _____
 Road Name _____
 Shire _____
 Nearest named place _____
 Direction of travel (N,S,E,W) _____
 Section No. _____
 Starting Point _____
 Odometer reading _____
 Ending Point _____
 Odometer reading _____
 Length of section _____

WIDTH OF ROAD RESERVE (m) _____

Side of the road Left Right

WIDTH OF VEGETATED ROADSIDE

1 – 5 m
 5 – 20 m
 Over 20 m

NATIVE VEGETATION ON ROADSIDE

Tree layer
 Shrub layer
 Ground layer

EXTENT OF NATIVE VEGETATION ON ROADSIDE

Less than 20%
 20 – 80%
 Over 80%

No. OF DIFFERENT NATIVE SPECIES

0 – 5
 6 – 19
 Over 20

VALUE AS A BIOLOGICAL CORRIDOR

Connects uncleared areas
 Flowering shrubs
 Large trees with hollows
 Hollow logs

PREDOMINANT ADJOINING LANDUSE

Agricultural crop or pasture:
 - Completely cleared
 - Scattered
 Uncleared land
 Plantation of non-native trees
 Urban or Industrial
 Railway Reserve parallel to road
 Drain Reserve parallel to road
 Other:

UTILITIES

Utility Present
 Utility Absent
 Type: _____

GENERAL WEEDS

Few weeds (<20% total plants)
 Half weeds (20 - 80% total)
 Mostly weeds (>80% total)
 Ground layer totally weeds

SALT AFFECTED ROADSIDE

< 20% salt affected
 20 – 80% salt affected
 > 80% salt affected

NOMINATED WEEDS

< 20% total weeds
 20 – 80% total weeds
 > 80% total weeds

< 20% total weeds
 20 – 80% total weeds
 > 80% total weeds

< 20% total weeds
 20 – 80% total weeds
 > 80% total weeds

< 20% total weeds
 20 – 80% total weeds
 > 80% total weeds

< 20% total weeds
 20 – 80% total weeds
 > 80% total weeds

< 20% total weeds
 20 – 80% total weeds
 80% total weeds

GENERAL COMMENTS

OFFICE USE ONLY
 Conservation value score

Appendix

2

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110001	1	0.00	3.70	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_OATS AFRICAN_LOVEGRASS
4110001	2	3.70	5.10	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	1	1	1	1	0	0	1	1	1	1	6	6	WILD_RADISH WILD_OATS
4110001	3	5.10	6.00	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	1	0	0	1	0	0	0	1	1	6	4	WILD_RADISH WILD_OATS
4110001	4	6.00	8.00	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	0	0	0	0	0	0	1	1	5	5	WILD_RADISH WILD_OATS
4110001	5	8.00	9.20	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	2	2	1	1	1	1	9	9	WILD_RADISH WILD_OATS
4110001	6	9.20	9.80	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	0	0	0	0	1	1	6	6	WILD_RADISH WILD_OATS
4110001	7	9.80	12.90	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	SAFFRON_THISTLE WILD_OATS
4110001	8	12.90	13.50	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	0	3	3	2	2	2	2	2	2	2	2	1	1	9	10	
4110001	9	13.50	15.50	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	
4110001	10	15.50	17.00	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_RADISH WILD_OATS
4110001	11	17.00	19.40	KOORDA - MOLLERIN RD	16/4/06	GERRY & COLLEEN	40	0	1	2	2	1	1	1	1	2	2	1	2	9	10	WILD_RADISH WILD_OATS
4110001	12	19.40	22.65	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	1	1	2	2	2	2	2	2	1	1	10	9	
4110001	13	22.65	24.40	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	2	2	2	2	2	2	2	2	1	1	11	10	WILD_OATS
4110001	14	24.40	25.06	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	2	2	1	1	1	1	2	1	1	0	9	7	WILD_OATS
4110001	15	25.06	27.70	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	2	2	2	2	2	2	2	2	1	1	11	10	WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110001	16	27.70	29.90	KOORDA - MOLLERIN RD	1/5/06	han	20	2	1	2	2	2	2	2	2	2	1	1	10	10		
4110001	17	29.90	31.30	KOORDA - MOLLERIN RD	1/5/06	han	20	2	3	2	2	2	2	2	2	2	1	1	10	9		
4110001	18	31.30	32.29	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	2	2	2	2	2	2	2	1	1	11	10		
4110001	19	32.29	33.18	KOORDA - MOLLERIN RD	1/5/06	han	20	2	0	2	2	2	2	2	0	0	1	1	9	9		
4110001	20	33.18	33.81	KOORDA - MOLLERIN RD	1/5/06	han	20	1	1	1	1	1	1	1	1	2	2	0	0	7	7	
4110001	21	33.81	34.48	KOORDA - MOLLERIN RD	1/5/06	han	20	0	3	1	2	0	2	0	1	1	2	0	1	4	8	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110001	22	34.48	35.81	KOORDA - MOLLERIN RD	1/5/06	han	20	0	3	2	2	1	1	1	1	2	2	0	1	6	7	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110002	1	0.00	3.70	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		0	0	1	2	1	1	1	1	1	1	1	6	7	WILD_OATS AFRICAN_LOVEGRASS CAPE_WEED	
4110002	2	3.70	5.85	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		2	2	2	2	2	2	1	1	2	2	1	1	8	8	CAPE_WEED SALT_AFFECTED_ROADSIDE
4110002	3	5.85	8.51	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		1	0	1	2	1	1	1	1	1	1	0	6	6	WILD_RADISH WILD_OATS AFRICAN_LOVEGRASS	
4110002	4	8.51	11.48	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		1	0	2	2	1	1	1	1	1	0	1	6	7	WILD_OATS AFRICAN_LOVEGRASS	
4110002	5	11.48	13.88	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		2	2	2	2	2	2	2	2	2	2	1	11	10		
4110002	6	13.88	14.62	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		1	0	2	2	2	2	2	1	2	2	1	0	11	9	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110002	7	14.62	15.02	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		2	1	2	2	2	2	2	2	2	1	1	9	10		
4110002	8	15.02	16.58	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		2	2	2	2	2	2	2	2	2	1	1	9	9	WILD_OATS AFRICAN_LOVEGRASS	
4110002	9	16.58	17.55	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS SALT_AFFECTED_ROADSIDE
4110002	10	17.55	19.25	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		0	0	2	2	1	1	1	1	2	2	0	0	7	7	WILD_OATS AFRICAN_LOVEGRASS
4110002	11	19.25	19.89	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		1	2	2	2	1	1	1	1	1	1	0	0	6	6	WILD_OATS
4110002	12	19.89	21.73	WONGAN HILLS-KOORDA RD	1/8/06	Hannah		2	2	2	2	2	2	2	2	2	1	1	9	9	WILD_RADISH WILD_OATS AFRICAN_LOVEGRASS	
4110003	1	0.00	1.87	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	0	0	0	0	0	0	4	4	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	2	1.87	2.87	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	3	2.87	3.37	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	2	2	1	1	7	7	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110003	4	3.37	5.17	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	5	5.17	9.96	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110003	6	9.96	12.38	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	7	12.38	14.08	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	8	14.08	14.88	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	1	1	1	1	7	7	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	9	14.88	17.38	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	0	0	1	1	1	1	6	6	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	10	17.38	18.28	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110003	11	18.28	23.18	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	2	2	1	1	8	8	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110003	12	23.18	24.78	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110003	13	23.70	24.78	KOORDA - DOWERIN RD	19/4/06	lynne lesley	20	3	3	2	2	2	2	2	2	2	2	2	2	10	12	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110004	1	0.00	2.50	KOORDA - MOLLERIN RD	16/4/06	gerry € colleen	0	3	3	2	2	2	2	2	2	1	1	2	2	9	9	WILD_OATS
4110004	2	2.50	3.20	KOORDA - MOLLERIN RD	16/4/06	gerry € colleen	20	0	0	2	2	2	2	2	2	1	1	2	2	11	11	WILD_OATS
4110004	3	3.20	5.60	KOORDA - MOLLERIN RD	16/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110004	4	5.60	8.32	KOORDA - MOLLERIN RD	16/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	0	0	1	2	7	8	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS
4110004	5	8.32	11.40	KOORDA - KULJA RD	16/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	0	0	1	2	7	8	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS
4110004	6	11.40	12.30	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	1	1	9	8	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110004	7	12.30	12.75	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	1	1	7	8	
4110004	8	12.75	14.55	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS AFRICAN_LOVEGRASS WILD_RADISH
4110004	9	14.55	15.20	KOORDA - KULJA RD	28/4/06	al and han	20	3	3	2	2	2	2	2	2	2	2	1	1	9	9	
4110004	10	15.20	16.45	KOORDA - KULJA RD	28/4/06	al and han	20	0	1	2	2	0	1	0	1	0	2	0	1	4	8	WILD_RADISH WILD_OATS
4110004	11	16.45	17.10	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110004	12	17.10	18.61	KOORDA - KULJA RD	28/4/06	al and han	20	1	0	2	2	2	2	1	1	2	2	1	1	9	9	
4110004	13	18.61	19.57	KOORDA - KULJA RD	28/4/06	al and han	20	1	0	2	1	1	1	1	0	2	2	1	0	9	6	WILD_OATS SAFFRON_THISTLE
4110004	14	19.57	21.45	KOORDA - KULJA RD	28/4/06	al and han	20	3	3	1	1	1	1	1	1	2	2	1	1	7	6	
4110004	15	21.45	23.10	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	1	1	0	0	7	7	AFRICAN_LOVEGRASS WILD_RADISH SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110004	16	23.10	23.93	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	1	1	0	0	0	0	1	1	0	0	4	4	AFRICAN_LOVEGRASS WILD_RADISH SALT_AFFECTED_ROADSIDE
4110004	17	23.93	25.82	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	1	1	0	0	0	0	1	1	0	0	3	4	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110004	18	25.82	27.90	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	1	1	1	1	1	1	1	1	0	0	6	6	CALTROP AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110004	19	27.90	29.30	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	AFRICAN_LOVEGRASS WILD_RADISH SALT_AFFECTED_ROADSIDE
4110004	20	29.30	30.55	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	1	11	10	AFRICAN_LOVEGRASS
4110004	21	30.55	31.59	KOORDA - KULJA RD	28/4/06	al and han	20	2	3	2	2	2	2	2	2	2	2	1	1	10	9	AFRICAN_LOVEGRASS
4110004	22	31.59	32.43	KOORDA - KULJA RD	28/4/06	al and han	20	2	2	2	2	2	2	2	2	2	2	1	1	10	9	AFRICAN_LOVEGRASS
4110004	23	32.43	32.90	KOORDA - KULJA RD	28/4/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	1	10	10	AFRICAN_LOVEGRASS
4110004	24	32.90	35.58	KOORDA - KULJA RD	31/3/06	al and han	20	1	0	2	2	2	2	2	2	2	2	1	1	10	11	AFRICAN_LOVEGRASS WILD_RADISH
4110004	25	35.58	36.30	KOORDA - KULJA RD	31/3/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	0	10	10	AFRICAN_LOVEGRASS WILD_RADISH
4110004	26	36.30	38.61	KOORDA - KULJA RD	31/3/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	1	10	10	
4110004	27	38.61	41.01	KOORDA - KULJA RD	31/3/06	al and han	20	2	0	2	2	2	2	2	2	2	2	1	1	10	10	
4110004	28	41.01	42.40	KOORDA - KULJA RD	31/3/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	1	9	10	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)	
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right		Left
4110004	29	42.40	45.94	KOORDA - KULJA RD	31/3/06	al and han	20	0	0	2	2	2	2	2	2	2	2	1	1	11	11		
4110004	30	45.94	47.82	KOORDA - KULJA RD	31/3/06	al and han	20	1	0	2	2	2	2	2	2	2	2	1	1	11	10		
4110006	1	0.00	2.29	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	1	1	1	1	1	1	1	2	2	1	1	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110006	2	2.29	3.06	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	2	2	0	0	1	0	2	2	1	1	8	7		
4110006	3	3.06	4.09	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	1	1	1	1	1	1	2	2	1	1	7	7		
4110006	4	4.09	4.94	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	0	0	0	0	0	0	2	2	0	0	3	3		
4110006	5	4.94	5.43	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	1	1	1	1	1	1	2	2	0	0	7	7	AFRICAN_LOVEGRASS	
4110006	6	5.43	7.09	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	1	1	0	0	0	0	2	2	0	0	5	5	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE	
4110006	7	7.09	14.33	KALANNIE - KULJA RD	18/4/06	marj	20	0	0	1	1	1	1	1	1	2	2	1	1	8	8	WILD_OATS AFRICAN_LOVEGRASS	
4110007	1	1.8	2.85	BOORALAMING - KULJA RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	0	0	2	2	0	1	7	8	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE	
4110007	2	2.85	6.4	BOORALAMING - KULJA RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	2	9	10	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS	
4110007	3	6.4	7.95	BOORALAMING - KULJA RD	20/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	1	1	1	1	7	7	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS	
4110007	4	7.95	8.9	BOORALAMING - KULJA RD	20/4/06	lynne lesley	20	1	3	2	2	1	1	1	1	2	2	2	2	8	9	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110007	5	8.9	13.04	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	1	1	0	0	7	7	WILD_OATS SALT_AFFECTED_ROADSIDE
4110007	6	13.04	15.26	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS
4110007	7	15.26	16.7	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110007	8	16.7	17.35	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	1	1	0	0	0	0	0	0	0	0	3	3	AFRICAN_LOVEGRASS WILD_OATS
4110007	9	17.35	20.04	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110007	10	20.04	21.74	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	1	1	1	1	1	1	1	1	0	0	6	6	AFRICAN_LOVEGRASS WILD_OATS
4110007	11	21.74	23.02	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110007	12	23.02	23.72	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110007	13	28.32	29.7	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	1	0	0	1	1	1	1	0	0	4	4	
4110007	14	29.7	29.97	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	2	2	2	2	2	2	1	1	9	10	WILD_OATS WILD_RADISH
4110007	15	29.97	30.79	BOORALAMING - KULJA RD	20/4/06	han	20	1	0	2	2	2	2	2	2	2	2	1	1	11	11	WILD_OATS WILD_RADISH
4110007	16	30.79	31.23	BOORALAMING - KULJA RD	20/4/06	han	20	1	0	2	2	2	1	2	1	2	1	1	0	11	7	WILD_OATS WILD_RADISH
4110007	17	31.23	33.32	BOORALAMING - KULJA RD	20/4/06	han	20	1	0	2	2	2	2	2	2	2	2	1	1	10	10	WILD_OATS WILD_RADISH
4110007	18	33.32	35.83	BOORALAMING - KULJA RD	20/4/06	han	20	2	2	2	2	2	2	2	2	2	2	1	1	11	11	WILD_OATS
4110007	19	35.83	36.77	BOORALAMING - KULJA RD	20/4/06	han	20	1	1	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110007	20	36.77	38.07	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	2	2	2	2	2	2	0	1	10	10	WILD_OATS
4110007	21	38.07	39.18	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	2	2	2	2	2	2	1	1	10	10	WILD_OATS
4110007	22	39.18	41.67	BOORALAMING - KULJA RD	20/4/06	han	20	0	0	2	2	2	2	2	2	2	2	0	0	10	10	WILD_OATS
4110008	1	0.00	3.04	COMMONWEALTH RD	16/4/06	gerry & colleen	20	0	0	2	2	1	1	1	1	2	2	2	1	10	9	WILD_OATS SALT_AFFECTED_ROADSIDE
4110008	2	3.04	6.36	COMMONWEALTH RD	16/4/06	gerry & colleen	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_OATS
4110008	3	6.36	13.28	COMMONWEALTH RD	16/4/06	gerry & colleen	60	2	0	2	2	2	2	2	2	2	2	2	1	12	11	WILD_OATS
4110008	4	13.28	13.54	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	1	1	1	1	1	2	2	0	0	7	7	
4110008	5	13.54	14.36	COMMONWEALTH RD	24/4/06	han and al	20	1	0	1	1	2	2	2	2	2	2	1	0	9	9	
4110008	6	14.36	17.19	COMMONWEALTH RD	24/4/06	han and al	20	1	1	2	2	2	2	2	2	2	2	1	1	10	10	
4110008	7	17.19	17.54	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	2	2	2	2	2	2	1	1	11	9	
4110008	8	17.54	20.71	COMMONWEALTH RD	24/4/06	han and al	20	1	0	2	2	2	2	2	2	2	2	1	1	11	11	
4110008	9	20.71	21.46	COMMONWEALTH RD	24/4/06	han and al	20	1	0	2	1	1	0	1	1	2	2	0	0	8	6	
4110008	10	21.46	24.99	COMMONWEALTH RD	24/4/06	han and al	20	1	1	2	2	2	2	2	2	2	2	1	1	11	11	
4110008	11	24.99	26.03	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	2	2	2	2	2	2	1	1	11	11	
4110008	12	26.03	26.23	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	1	2	1	1	2	2	0	1	8	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110008	13	26.23	27.21	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110008	14	27.21	28.78	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	1	1	1	1	2	2	1	0	9	8	
4110008	15	28.78	33.38	COMMONWEALTH RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	SALT_AFFECTED_ROADSIDE
4110009	1	0.00	1.65	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	1	8	9	WILD_OATS WILD_RADISH
4110009	2	1.65	3.80	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	1	1	2	2	1	1	2	2	1	1	9	9	WILD_OATS WILD_RADISH
4110009	3	3.80	4.76	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	1	0	9	8	
4110009	4	4.76	5.80	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110009	5	5.80	10.42	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	1	1	0	0	0	0	1	1	0	0	4	4	
4110009	6	10.42	12.43	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	1	1	1	0	1	0	2	2	0	0	7	5	WILD_OATS
4110009	7	12.43	13.77	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	1	2	0	1	0	1	1	2	0	0	4	8	WILD_OATS
4110009	8	13.77	16.76	KOORDA NORTH WEST RD	26/4/06	han	20	3	3	1	1	1	1	1	1	2	2	1	1	7	7	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110009	9	16.76	18.65	KOORDA NORTH WEST RD	26/4/06	han	20	3	3	2	2	2	2	1	1	2	2	1	1	9	9	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110009	10	18.65	20.80	KOORDA NORTH WEST RD	26/4/06	han	20	1	1	2	2	2	2	1	1	2	2	1	1	9	10	
4110009	11	20.80	21.20	KOORDA NORTH WEST RD	26/4/06	han	20	1	1	2	2	2	2	1	1	2	2	1	1	10	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110009	12	21.20	21.98	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	1	1	0	0	1	1	1	1	0	0	5	5	WILD_OATS
4110009	13	21.98	23.29	KOORDA NORTH WEST RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS
4110009	14	23.29	25.54	KOORDA NORTH WEST RD	26/4/06	han	20	0	3	2	2	2	2	2	2	2	2	2	2	11	10	WILD_OATS
4110010	1	0.00	3.20	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	0	3	3	2	2	2	2	2	2	2	2	2	2	10	11	WILD_RADISH WILD_OATS
4110010	2	3.20	4.00	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	0	0	3	2	2	1	1	1	1	1	1	2	2	9	8	WILD_RADISH WILD_OATS
4110010	3	4.00	6.50	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	0	0	3	2	2	0	2	0	1	0	2	0	1	4	9	WILD_RADISH WILD_OATS
4110010	4	6.50	6.80	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	0	0	3	2	2	2	1	2	2	2	2	2	1	10	9	
4110010	5	6.80	7.85	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_OATS WILD_RADISH
4110010	6	7.85	10.10	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	1	1	0	0	1	1	0	0	0	0	4	4	WILD_OATS WILD_RADISH
4110010	7	10.10	11.35	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	0	2	0	1	0	1	0	1	0	1	2	8	
4110010	8	11.35	17.30	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	2	2	2	2	2	2	1	2	11	12	WILD_OATS
4110010	9	17.30	21.23	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH WILD_OATS
4110010	10	21.23	23.45	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	0	1	0	1	0	1	0	1	4	8	WILD_RADISH WILD_OATS
4110010	11	23.45	24.68	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	1	9	8	WILD_RADISH WILD_OATS
4110010	12	24.68	27.10	MOLLERIN ROCK SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	1	2	0	1	0	1	0	1	1	2	4	9	WILD_RADISH WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110011	1	0.00	0.84	DUKIN WEST RD	19/4/06	lesley lynne	20	3	3	2	2	1	1	2	2	0	0	2	2	8	8	WILD_OATS
4110011	2	0.84	1.18	DUKIN WEST RD	19/4/06	lesley lynne	20	0	0	1	1	0	0	0	0	1	1	0	0	4	4	WILD_OATS
4110011	3	1.18	6.62	DUKIN WEST RD	19/4/06	lesley lynne	20	3	3	2	2	0	0	1	1	2	2	2	2	8	8	WILD_OATS SALT_AFFECTED_ROADSIDE
4110011	4	6.62	7.21	DUKIN WEST RD	19/4/06	lesley lynne	20	0	0	2	2	0	0	1	1	2	2	2	1	9	8	WILD_OATS AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110011	5	7.21	12.35	DUKIN WEST RD	19/4/06	lynne lesley	20	3	3	2	2	1	1	1	1	2	2	2	2	10	10	SALT_AFFECTED_ROADSIDE
4110011	6	12.35	13.69	DUKIN WEST RD	19/4/06	lynne lesley	20	0	3	2	2	1	1	1	1	2	2	1	2	9	9	SALT_AFFECTED_ROADSIDE
4110011	7	13.69	16.13	DUKIN WEST RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH AFRICAN_LOVEGRASS
4110011	8	16.13	17.27	DUKIN WEST RD	19/4/06	lynne lesley	20	0	0	1	1	1	1	1	1	2	2	2	2	9	9	WILD_RADISH AFRICAN_LOVEGRASS
4110012	1	0.00	2.72	MOLLERIN NORTH RD	24/4/06	al and han	20	1	1	2	2	1	1	1	1	2	2	1	1	7	9	WILD_OATS
4110012	2	2.72	3.82	MOLLERIN NORTH RD	24/4/06	al and han	20	0	0	1	1	1	1	1	1	2	2	0	0	7	7	SALT_AFFECTED_ROADSIDE
4110012	3	3.82	6.38	MOLLERIN NORTH RD	24/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110012	4	6.38	8.39	MOLLERIN NORTH RD	24/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_OATS
4110012	5	8.39	9.52	MOLLERIN NORTH RD	24/4/06	al and han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	SALT_AFFECTED_ROADSIDE
4110012	6	9.52	11.52	MOLLERIN NORTH RD	24/4/06	al and han	20	1	1	2	2	2	2	1	1	2	2	2	2	9	9	SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110012	7	11.52	13.42	MOLLERIN NORTH RD	24/4/06	al and han	20	1	1	2	2	2	2	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110012	8	13.42	14.26	MOLLERIN NORTH RD	24/4/06	al and han	20	2	2	2	2	1	1	1	1	2	2	1	1	7	7	SALT_AFFECTED_ROADSIDE
4110013	1	0	5.15	MARGARETTE RD	14/4/06	longmuir	20	1	0	1	1	1	1	0	0	2	2	0	0	6	6	
4110013	2	5.15	9.75	MARGARETTE RD	14/4/06	longmuir	20	0	0	1	1	1	1	1	1	2	2	0	1	7	8	
4110013	3	10.8	11.7	MARGARETTE RD	14/4/06	longmuir	20	0	1	1	2	0	1	1	0	2	2	0	1	6	8	
4110013	4	11.7	14	MARGARETTE RD	14/4/06	longmuir	20	0	1	2	0	1	0	0	0	2	2	0	0	7	4	
4110013	5	14	16	MARGARETTE RD	14/4/06	longmuir	20	0	0	0	1	0	1	0	0	2	2	0	1	4	7	AFRICAN_LOVEGRASS
4110013	6	16	16.7	MARGARETTE RD	14/4/06	longmuir	20	0	0	1	1	1	1	0	0	2	2	1	1	7	7	AFRICAN_LOVEGRASS
4110013	7	16.7	18.5	MARGARETTE RD	14/4/06	longmuir	20	0	0	2	2	1	1	0	0	2	2	0	2	7	9	AFRICAN_LOVEGRASS
4110014	1	0.00	1.35	MAHER RD	17/4/06	lesley lynne	20	0	0	2	2	2	2	1	1	2	2	2	2	11	11	
4110014	2	1.35	1.80	MAHER RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	2	2	1	2	8	8	
4110014	3	1.80	3.35	MAHER RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	2	2	2	2	10	8	
4110014	4	3.35	4.30	MAHER RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	2	2	1	2	9	8	
4110014	5	4.30	7.35	MAHER RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	
4110014	6	7.35	9.10	MAHER RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	1	1	0	0	2	2	8	8	WILD_RADISH
4110014	7	9.10	10.05	MAHER RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	0	1	0	0	2	2	2	2	8	9	WILD_RADISH SALT_AFFECTED_ROADSIDE
4110014	8	10.05	13.60	MAHER RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH
4110015	1	5.80	6.50	EAST BOUNDARY RD	15/4/06	gerry € colleen0	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110015	2	6.50	9.00	EAST BOUNDARY RD	15/4/06	gerry € colleen0	20	0	0	2	2	1	1	2	2	1	1	2	2	10	10	WILD_RADISH WILD_OATS
4110015	3	9.00	10.30	EAST BOUNDARY RD	15/4/06	gerry € colleen0	0	0	0	2	2	2	1	2	1	2	2	2	1	10	9	WILD_OATS
4110015	4	10.30	11.20	EAST BOUNDARY RD	15/4/06	gerry € colleen0	0	3	0	2	2	2	1	2	1	2	1	2	1	10	8	WILD_OATS
4110015	5	11.20	12.00	EAST BOUNDARY RD	15/4/06	gerry € colleen0	20	0	2	2	2	0	1	1	1	1	1	1	1	7	8	WILD_OATS
4110015	6	12.00	13.00	EAST BOUNDARY RD	15/4/06	gerry € colleen0	20	0	0	2	2	0	0	0	0	0	0	1	1	5	5	WILD_RADISH WILD_OATS
4110015	7	13.00	13.95	EAST BOUNDARY RD	15/4/06	gerry € colleen0	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH WILD_OATS
4110015	8	13.95	15.98	EAST BOUNDARY RD	15/4/06	gerry € colleen	20	0	0	2	2	2	2	2	2	2	2	1	1	11	11	WILD_RADISH WILD_OATS
4110015	9	15.98	20.16	EAST BOUNDARY RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	1	1	2	2	8	8	WILD_OATS
4110015	10	20.16	20.54	EAST BOUNDARY RD	15/4/06	gerry € colleen	20	0	0	2	2	0	0	0	0	1	1	0	0	5	5	WILD_OATS
4110015	11	20.54	24.62	EAST BOUNDARY RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	2	2	2	2	2	1	11	10	WILD_RADISH WILD_OATS
4110015	12	24.62	25.40	EAST BOUNDARY RD	15/4/06	gerry € colleen	40	1	1	2	2	1	1	2	2	1	1	1	2	9	10	WILD_RADISH WILD_OATS
4110015	13	25.40	30.88	EAST BOUNDARY RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	2	2	1	1	2	2	10	10	WILD_RADISH WILD_OATS
4110016	1	0.00	2.07	MULJI RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	
4110016	2	2.07	3.03	MULJI RD	16/4/06	GERRY & COLLEEN	40	0	1	2	2	1	1	2	2	1	2	2	2	10	11	
4110016	3	3.03	7.30	MULJI RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110016	4	7.30	8.96	MULJI RD	16/4/06	GERRY & COLLEEN	20	0	0	1	1	0	1	0	1	0	1	0	0	3	6	WILD_RADISH WILD_OATS
4110017	1	0.00	5.13	MARTIN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110017	2	5.13	5.66	MARTIN RD	18/4/06	marj	20	1	1	1	1	0	1	1	1	2	2	1	1	5	8	
4110017	3	5.66	9.16	MARTIN RD	18/4/06	marj	20	0	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110017	4	9.16	11.72	MARTIN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110017	5	11.72	12.60	MARTIN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110017	6	12.60	15.55	MARTIN RD	18/4/06	marj	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110017	7	15.55	16.61	MARTIN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110019	1	0.00	0.59	ANDERSON RD	17/4/06	longmuir	100	3	0	2	2	1	1	0	0	2	2	1	1	6	8	
4110019	2	0.59	3.79	ANDERSON RD	17/4/06	longmuir	20	0	0	1	1	1	1	0	0	2	2	1	1	7	7	
4110019	3	3.79	4.59	ANDERSON RD	17/4/06	longmuir	20	0	0	1	2	0	1	0	0	2	2	0	0	5	7	SALT_AFFECTED_ROADSIDE
4110019	4	4.59	7.09	ANDERSON RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110019	5	7.09	7.89	ANDERSON RD	16/4/06	storer	20	0	0	2	2	1	1	0	1	1	1	2	2	8	7	WILD_OATS AFRICAN_LOVEGRASS
4110019	6	7.89	8.89	ANDERSON RD	16/4/06	storer	20	0	0	2	2	1	1	1	0	1	1	2	2	7	8	WILD_OATS AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110019	7	8.89	14.09	ANDERSON RD	16/4/06	storer	20	0	0	2	2	1	1	0	0	1	2	1	2	8	7	WILD_OATS AFRICAN_LOVEGRASS
4110019	8	14.09	14.69	ANDERSON RD	16/4/06	storer	20	0	0	1	1	2	2	0	0	2	2	1	1	8	8	WILD_OATS AFRICAN_LOVEGRASS
4110019	9	14.69	15.09	ANDERSON RD	16/4/06	storer	20	0	0	1	2	1	1	1	0	2	1	1	1	7	8	WILD_OATS AFRICAN_LOVEGRASS
4110019	10	15.09	16.69	ANDERSON RD	16/4/06	storer	20	0	3	2	2	2	2	1	2	2	2	2	2	12	11	WILD_OATS AFRICAN_LOVEGRASS
4110019	11	16.69	18.49	ANDERSON RD	16/4/06	storer	20	0	0	2	2	0	0	0	0	2	2	2	2	8	8	WILD_OATS AFRICAN_LOVEGRASS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110019	12	18.49	18.89	ANDERSON RD	16/4/06	storer	20	0	0	2	2	2	2	0	0	2	2	2	2	10	10	WILD_OATS AFRICAN_LOVEGRASS
4110019	13	18.89	21.29	ANDERSON RD	16/4/06	storer	20	0	0	2	2	1	1	0	0	2	2	2	2	9	9	WILD_OATS AFRICAN_LOVEGRASS CALTROP
4110019	14	21.29	24.49	ANDERSON RD	16/4/06	storer	20	0	0	2	2	2	1	1	1	2	2	2	2	10	10	WILD_OATS AFRICAN_LOVEGRASS CALTROP
4110019	15	24.49	30.09	ANDERSON RD	24/4/06	han and al	20	1	1	1	1	2	2	1	1	2	2	2	2	10	10	WILD_OATS
4110020	1	0.00	5.00	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	40	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110020	2	5.00	9.60	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	40	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110020	3	9.60	11.00	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	40	0	0	2	2	0	0	0	0	2	2	1	1	7	7	SALT_AFFECTED_ROADSIDE
4110020	4	11.00	13.20	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	100	0	3	2	2	0	0	0	0	2	2	1	1	7	5	
4110020	5	13.20	15.30	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	CALTROP
4110020	6	15.30	20.00	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	CALTROP
4110020	7	20.00	25.80	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	2	9	10	CALTROP
4110020	8	25.80	27.16	KULJA-MOLLERIN ROCK RD	17/4/06	longmuir	100	3	3	2	2	2	0	2	2	2	2	1	1	9	7	CALTROP
4110021	1	0.67	8.17	INMAN RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	0	0	2	2	2	2	8	8	WILD_RADISH AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110021	2	8.17	9.47	INMAN RD	20/4/06	lynne lesley	20	0	0	1	2	1	1	1	1	1	1	2	1	8	8	WILD_RADISH AFRICAN_LOVEGRASS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110021	3	9.47	9.97	INMAN RD	20/4/06	lynne lesley	20	0	3	2	2	1	1	1	1	2	2	1	2	9	8	WILD_RADISH AFRICAN_LOVEGRASS
4110021	4	9.97	10.47	INMAN RD	20/4/06	lynne lesley	20	0	0	1	1	0	0	0	0	0	0	0	0	3	3	WILD_RADISH AFRICAN_LOVEGRASS
4110022	1	0.00	3.36	NARKAL RD	16/4/06	GERRY & COLLEEN	20	3	0	2	2	1	1	2	2	2	1	2	2	10	10	WILD_RADISH WILD_OATS
4110022	2	3.36	5.71	NARKAL RD	16/4/06	GERRY & COLLEEN	0	3	3	2	2	2	2	2	2	2	2	2	2	11	10	WILD_RADISH WILD_OATS
4110023	1	0.00	1.80	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	2	1	1	1	2	2	1	0	10	8	WILD_RADISH WILD_OATS
4110023	2	1.80	2.25	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	1	0	1	0	2	2	0	0	8	6	WILD_OATS AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110023	3	2.25	3.60	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	1	1	1	1	2	2	1	0	9	8	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110023	4	3.60	5.43	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	1	1	1	1	2	2	0	0	7	8	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110023	5	5.43	5.91	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	1	1	1	1	2	2	0	0	8	7	WILD_RADISH WILD_OATS
4110023	6	5.91	7.25	RABBIT PROOF FENCE RD	26/4/06	han	20	1	3	2	2	2	2	2	2	2	2	1	1	10	9	WILD_OATS
4110023	7	7.25	8.90	RABBIT PROOF FENCE RD	26/4/06	han	20	1	2	2	2	2	2	2	2	2	2	1	1	10	10	WILD_OATS
4110023	8	8.90	10.40	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	2	2	1	1	2	2	1	1	9	10	
4110023	9	10.40	11.92	RABBIT PROOF FENCE RD	26/4/06	han	20	1	0	2	2	2	1	1	1	2	2	1	0	10	8	WILD_OATS WILD_RADISH
4110024	1	0.00	4.00	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	2	2	2	2	2	2	1	1	10	11	
4110024	2	4.00	4.50	SANDPHIRE RD	24/4/06	han and al	20	1	0	2	2	1	1	1	1	2	2	1	1	8	9	WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110024	3	4.50	7.00	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	1	1	2	2	2	2	1	1	10	10	
4110024	4	7.00	8.00	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110024	5	8.00	9.10	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	2	2	2	2	2	2	1	1	11	11	
4110024	6	9.10	9.72	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	2	2	2	2	2	2	1	1	9	11	
4110024	7	9.72	12.70	SANDPHIRE RD	24/4/06	han and al	20	1	1	2	2	2	2	1	1	2	2	1	1	10	10	
4110025	1	0.00	3.10	LAMB RD	17/4/06	longmuir	20	0	0	1	1	0	0	0	0	2	2	0	0	5	5	WILD_OATS WILD_RADISH
4110025	2	3.10	5.10	LAMB RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_OATS WILD_RADISH
4110025	3	5.10	9.40	LAMB RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_OATS WILD_RADISH
4110025	4	9.40	10.69	LAMB RD	17/4/06	longmuir	20	0	0	2	2	1	1	0	0	2	2	1	1	8	8	WILD_OATS WILD_RADISH
4110026	1	0.00	1.20	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	1	1	0	1	2	2	2	2	10	9	AFRICAN_LOVEGRASS WILD_OATS
4110026	2	1.20	1.70	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	1	1	0	0	2	2	1	1	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110026	3	1.70	2.10	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	1	1	1	1	2	2	2	1	9	10	AFRICAN_LOVEGRASS WILD_OATS
4110026	4	2.10	4.20	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	2	2	1	0	2	2	1	0	8	10	AFRICAN_LOVEGRASS WILD_OATS
4110026	5	4.20	4.70	CHAPMAN RD	16/4/06	storer	20	0	3	2	2	2	2	1	1	2	2	1	2	11	10	AFRICAN_LOVEGRASS WILD_OATS
4110026	6	4.70	5.20	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	1	1	0	0	2	2	1	1	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110026	8	5.20	5.60	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	2	2	0	1	2	2	1	1	10	9	
4110026	7	5.60	6.30	CHAPMAN RD	16/4/06	storer	20	0	0	2	2	2	2	0	0	2	2	1	2	10	9	AFRICAN_LOVEGRASS WILD_OATS
4110027	1	0.00	2.35	COOPER RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	0	0	1	1	0	0	2	2	7	7	WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110027	2	2.35	9.10	COOPER RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	2	2	2	2	2	2	11	11	WILD_OATS
4110028	1	0.00	0.90	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	0	0	0	0	0	0	0	0	4	4	WILD_OATS
4110028	2	0.90	2.16	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	2	2	2	1	2	2	1	0	10	9	WILD_OATS
4110028	3	2.16	3.28	KIRWAN EAST RD	1/5/06	han	20	0	0	1	1	0	0	1	1	1	1	0	0	4	5	WILD_OATS WILD_RADISH AFRICAN_LOVEGRASS
4110028	4	3.28	3.90	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	1	2	1	1	1	2	0	1	7	9	WILD_OATS
4110028	5	3.90	4.29	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	2	2	2	1	2	2	1	1	9	9	WILD_OATS
4110028	6	4.29	5.22	KIRWAN EAST RD	1/5/06	han	20	0	0	2	1	0	0	0	0	1	1	0	0	5	4	WILD_RADISH
4110028	7	5.22	5.50	KIRWAN EAST RD	1/5/06	han	20	0	1	1	2	0	2	0	1	1	2	0	1	4	9	WILD_RADISH
4110028	8	5.50	6.77	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	1	2	1	2	2	2	0	1	8	10	
4110028	9	6.77	7.38	KIRWAN EAST RD	1/5/06	han	20	0	1	2	2	2	2	2	2	2	2	1	1	10	11	
4110028	10	7.38	8.35	KIRWAN EAST RD	1/5/06	han	20	0	3	2	2	2	2	2	2	2	2	1	1	10	9	
4110028	11	8.35	9.01	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	2	2	2	2	2	2	1	1	10	11	
4110028	12	9.01	10.56	KIRWAN EAST RD	1/5/06	han	20	0	0	2	2	2	2	2	2	2	2	1	1	10	10	
4110029	1	0.00	2.30	BURTON RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_OATS SALT_AFFECTED_ROADSIDE
4110029	2	2.30	4.70	BURTON RD	15/4/06	gerry € colleen	20	0	0	2	2	0	0	1	1	0	0	1	1	6	6	WILD_OATS SALT_AFFECTED_ROADSIDE
4110029	3	4.70	6.60	BURTON RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110029	4	6.60	8.00	BURTON RD	15/4/06	gerry € colleen	20	0	0	1	1	1	1	0	0	0	0	1	1	5	5	WILD_RADISH WILD_OATS
4110029	5	8.00	9.40	BURTON RD	15/4/06	gerry € colleen	20	0	0	1	2	0	1	0	1	0	2	0	2	10	3	WILD_RADISH WILD_OATS
4110029	6	9.40	14.74	BURTON RD	15/4/06	gerry € colleen	20	0	0	2	2	1	1	2	2	2	2	2	2	11	11	WILD_RADISH WILD_OATS
4110030	1	0.00	2.48	GRAVES RD	24/4/06	han and al	20	1	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110030	2	2.48	4.08	GRAVES RD	24/4/06	han and al	20	1	0	1	1	1	1	1	1	2	2	1	0	7	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110030	3	4.08	5.58	GRAVES RD	24/4/06	han and al	20	1	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110030	4	5.58	7.37	GRAVES RD	24/4/06	han and al	20	0	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110031	1	0.00	0.48	HAWKINS RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	7	8	SALT_AFFECTED_ROADSIDE
4110031	2	0.48	0.94	HAWKINS RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	0	0	8	9	
4110031	3	0.94	1.98	HAWKINS RD	26/4/06	han	20	3	0	2	2	2	2	2	2	2	2	2	1	11	11	
4110031	4	1.98	2.45	HAWKINS RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	0	1	9	10	
4110031	5	2.45	2.99	HAWKINS RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	SALT_AFFECTED_ROADSIDE
4110031	6	2.99	4.08	HAWKINS RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_RADISH AFRICAN_LOVEGRASS
4110031	7	4.08	4.86	HAWKINS RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	7	7	WILD_RADISH
4110031	8	4.86	5.51	HAWKINS RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	2	2	9	10	WILD_RADISH
4110031	9	5.51	7.04	HAWKINS RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110031	10	7.04	7.54	HAWKINS RD	26/4/06	han	20	0	0	1	1	1	1	1	1	2	2	0	0	7	7	
4110031	11	7.54	10.64	HAWKINS RD	26/4/06	han	20	3	0	2	2	2	2	1	1	2	2	0	0	8	9	SALT_AFFECTED_ROADSIDE
4110032	1	0.00	5.15	BEST RD	20/4/06	lynne lesle	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	
4110032	2	5.15	10.70	BEST RD	20/4/06	lynne lesle	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH WILD_OATS
4110032	3	10.70	15.65	BEST RD	20/4/06	lynne lesle	20	3	3	2	2	1	1	0	0	2	2	0	0	6	6	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110033	1	0.00	1.50	MONINGARIN EAST RD	28/4/06	han and al	20	3	3	2	2	2	2	2	2	2	2	2	2	10	10	
4110033	2	1.50	1.90	MONINGARIN EAST RD	28/4/06	han and al	20	3	1	2	2	2	2	2	2	2	2	1	1	9	11	
4110033	3	1.90	3.20	MONINGARIN EAST RD	28/4/06	han and al	20	2	1	2	2	2	2	2	2	2	2	1	1	11	11	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110033	4	3.20	4.27	MONINGARIN EAST RD	28/4/06	han and al	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110033	5	4.27	4.60	MONINGARIN EAST RD	28/4/06	han and al	20	0	1	2	2	1	1	1	1	1	2	0	1	7	9	
4110033	6	4.60	6.70	MONINGARIN EAST RD	28/4/06	han and al	20	0	0	2	2	2	1	1	1	2	2	0	0	9	8	AFRICAN_LOVEGRASS
4110033	7	6.70	7.74	MONINGARIN EAST RD	28/4/06	han and al	20	1	0	1	1	0	0	0	1	1	2	0	0	4	6	AFRICAN_LOVEGRASS
4110034	1	0.00	4.10	CHOWN TANK RD	17/4/06	longmuir	20	3	3	1	1	0	0	0	0	2	2	0	0	5	4	
4110034	2	4.10	6.60	CHOWN TANK RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110034	3	6.60	8.10	CHOWN TANK RD	28/4/06	han and al	20	0	0	1	1	0	0	0	0	2	2	0	0	5	5	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110034	4	8.10	8.90	CHOWN TANK RD	28/4/06	han and al	20	0	0	2	1	1	1	1	0	2	2	0	0	8	6	AFRICAN_LOVEGRASS
4110034	5	8.90	10.40	CHOWN TANK RD	28/4/06	han and al	20	1	0	2	2	2	1	1	1	2	2	1	0	10	8	AFRICAN_LOVEGRASS
4110034	6	10.40	12.80	CHOWN TANK RD	28/4/06	han and al	20	0	1	2	2	2	2	2	2	2	2	1	1	11	9	AFRICAN_LOVEGRASS
4110034	7	12.80	13.60	CHOWN TANK RD	28/4/06	han and al	20	3	3	1	1	1	1	1	1	2	2	0	0	6	6	AFRICAN_LOVEGRASS
4110034	8	13.60	14.20	CHOWN TANK RD	28/4/06	han and al	20	0	0	2	2	0	0	0	0	2	2	0	0	6	6	
4110034	9	14.20	14.43	CHOWN TANK RD	28/4/06	han and al	20	0	3	2	2	1	1	1	1	2	2	1	1	9	7	
4110035	1	0.00	6.30	NARKAL NORTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	2	2	1	1	2	2	10	10	WILD_RADISH WILD_OATS
4110035	2	6.30	7.15	NARKAL NORTH RD	16/4/06	GERRY & COLLEEN	0	3	3	2	2	2	2	2	2	2	2	2	2	10	10	
4110036	1	0.00	1.96	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	2	2	2	2	1	1	11	11	
4110036	2	1.96	4.96	BLACK RD	24/4/06	Al ad Han	20	2	1	2	1	2	2	2	2	2	2	2	1	10	10	
4110036	3	4.96	6.13	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	1	1	2	2	1	1	10	10	SALT_AFFECTED_ROADSIDE
4110036	4	6.13	7.26	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	1	1	2	2	1	1	9	10	SALT_AFFECTED_ROADSIDE
4110036	5	7.26	8.37	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	1	1	2	2	1	1	9	10	SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110036	6	8.37	9.26	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	1	2	1	1	2	2	1	1	8	10	SALT_AFFECTED_ROADSIDE
4110036	7	9.26	10.11	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	1	1	2	2	2	2	11	11	SALT_AFFECTED_ROADSIDE
4110036	8	10.11	11.10	BLACK RD	24/4/06	Al ad Han	20	1	1	2	2	2	2	1	1	2	2	2	2	11	11	
4110036	9	11.10	13.00	BLACK RD	24/4/06	Al ad Han	20	1	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110036	1	13.00	16.00	BLACK RD	31/7/06	Hannah		1	1	2	2	2	2	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110036	2	16.00	21.43	BLACK RD	31/7/06	Hannah		2	1	2	2	2	1	2	2	2	2	1	0	11	8	SALT_AFFECTED_ROADSIDE
4110036	3	21.43	22.43	BLACK RD	31/7/06	Hannah		2	2	2	2	2	2	2	2	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110036	4	22.43	24.47	BLACK RD	31/7/06	Hannah		0	0	1	1	0	0	1	1	1	1	0	0	5	5	
4110036	5	24.47	26.00	BLACK RD	31/7/06	Hannah		2	2	2	2	2	2	2	2	2	2	2	1	10	9	
4110036	6	26.00	26.55	BLACK RD	31/7/06	Hannah		1	2	2	2	2	2	2	1	2	2	1	0	10	8	
4110036	7	26.55	29.35	BLACK RD	31/7/06	Hannah		1	1	2	2	2	2	2	2	2	2	0	0	10	10	
4110037	1	0.00	1.24	ORCHARD RD	24/4/06	han and al	20	1	1	1	2	1	1	0	1	1	2	0	1	5	9	
4110037	2	1.24	1.87	ORCHARD RD	24/4/06	han and al	20	1	1	1	1	1	2	0	1	2	2	0	1	6	9	
4110037	3	1.87	2.41	ORCHARD RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110037	4	2.41	3.15	ORCHARD RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110037	5	3.15	4.08	ORCHARD RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110037	6	4.08	4.47	ORCHARD RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	9	10	SALT_AFFECTED_ROADSIDE
4110037	7	4.47	6.52	ORCHARD RD	24/4/06	han and al	20	0	0	1	1	2	2	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110037	8	6.52	7.79	ORCHARD RD	24/4/06	han and al	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110038	1	0.00	3.68	BURTON SOUTH RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	8	SAFFRON_THISTLE WILD_OATS
4110039	1	0.00	0.70	NEWCARLBEON RD	28/4/06	han and al	20	3	3	2	2	2	2	2	2	2	2	1	1	11	11	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110039	2	0.70	1.70	NEWCARLBEON RD	28/4/06	han and al	20	0	3	2	2	2	2	2	2	2	1	1	11	9		
4110039	3	1.70	2.13	NEWCARLBEON RD	28/4/06	han and al	20	3	3	2	2	2	2	2	2	2	1	1	9	9		
4110039	4	2.13	4.65	NEWCARLBEON RD	28/4/06	han and al	20	1	0	1	1	2	2	1	1	2	2	1	1	9	8	
4110040	1	2.50	2.60	BURAKIN EAST RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110040	2	2.60	3.37	BURAKIN EAST RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	
4110041	1	0.00	1.12	BUNKETCH-KULJA RD	21/4/06	han	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	WILD_RADISH WILD_OATS
4110041	2	1.12	3.20	BUNKETCH-KULJA RD	21/4/06	han	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH WILD_OATS
4110041	3	3.20	3.78	BUNKETCH-KULJA RD	21/4/06	han	20	1	0	1	0	1	0	1	0	2	2	1	0	8	2	
4110043	1	3.48	5.18	COLLINS RD	24/4/06	al and han	20	1	1	2	2	2	2	2	2	2	2	1	1	11	11	
4110044	1	0.00	0.77	OVENS RD	16/4/06	storer	20	0	0	2	2	0	0	0	0	0	0	1	1	5	5	AFRICAN_LOVEGRASS WILD_OATS
4110044	2	0.77	1.24	OVENS RD	16/4/06	storer	20	0	0	0	2	0	1	0	0	0	1	1	2	3	8	AFRICAN_LOVEGRASS WILD_OATS
4110044	3	1.24	3.42	OVENS RD	16/4/06	storer	20	0	0	2	2	1	2	0	0	2	2	1	1	8	9	AFRICAN_LOVEGRASS WILD_OATS
4110044	4	3.42	3.59	OVENS RD	16/4/06	storer	20	0	0	2	1	1	1	0	0	2	2	1	1	8	7	AFRICAN_LOVEGRASS WILD_OATS
4110044	5	3.59	4.16	OVENS RD	16/4/06	storer	20	0	0	2	2	2	2	0	0	1	2	1	1	8	9	AFRICAN_LOVEGRASS WILD_OATS
4110045	1	0.00	1.48	WILSON RD	1/5/06	han	20	0	0	2	2	2	2	2	2	2	2	1	1	11	11	WILD_RADISH
4110045	2	1.48	3.91	WILSON RD	1/5/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	WILD_RADISH SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110046	1	0.00	0.90	DOWNIE RD	26/4/06	han	20	1	0	2	1	2	1	1	1	2	2	0	0	9	7	WILD_RADISH
4110046	2	0.90	2.05	DOWNIE RD	26/4/06	han	20	1	0	2	2	2	2	1	1	2	2	1	1	9	10	AFRICAN_LOVEGRASS WILD_OATS
4110046	3	2.05	3.60	DOWNIE RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	AFRICAN_LOVEGRASS WILD_OATS
4110047	1	0.00	2.55	MONTAGUE RD	26/4/06	han	20	0	0	1	1	1	1	1	1	1	1	0	0	6	6	AFRICAN_LOVEGRASS WILD_OATS WILD_RADISH
4110048	1	0.00	1.05	REMNANT RD	19/4/06	lesley lynne	20	0	0	2	2	0	0	1	1	2	2	2	1	9	8	WILD_OATS AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110048	2	1.05	2.40	REMNANT RD	19/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_OATS AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110049	1	0.00	2.30	CORNISH RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	AFRICAN_LOVEGRASS WILD_RADISH
4110049	2	2.30	3.80	CORNISH RD	17/4/06	lesley lynne	20	0	0	2	2	0	0	1	1	1	1	2	2	8	8	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110049	3	3.80	4.90	CORNISH RD	17/4/06	lesley lynne	20	1	0	2	2	1	1	1	1	2	2	2	2	10	10	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110050	1	0.00	2.22	LARKMAN RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	0	0	2	2	8	8	WILD_RADISH WILD_OATS
4110051	1	0.00	2.24	BOWMAN RD	17/4/06	lesley and lynne	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_RADISH WILD_OATS
4110052	1	0.00	0.74	GREEN RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	1	1	0	0	2	2	8	8	WILD_RADISH

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110052	2	0.74	1.64	GREEN RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	1	1	2	2	2	1	10	9	WILD_RADISH
4110052	3	1.64	2.24	GREEN RD	17/4/06	LESLEY LYNNE	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_OATS WILD_RADISH
4110053	1	0.00	2.38	GRIFFITH RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH
4110054	1	0.00	4.09	HENNING RD	26/4/06	han	20	0	1	2	2	1	1	1	1	2	2	1	1	8	8	
4110055	1	0.00	3.78	POSSELT RD	26/4/06	han	20	0	0	1	1	0	0	0	0	1	1	0	0	4	4	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110055	2	3.78	5.19	POSSELT RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	7	7	WILD_OATS SALT_AFFECTED_ROADSIDE
4110055	3	5.19	5.73	POSSELT RD	26/4/06	han	20	0	0	1	1	1	1	1	0	2	2	0	0	6	5	WILD_OATS SALT_AFFECTED_ROADSIDE
4110055	4	5.73	6.60	POSSELT RD	26/4/06	han	20	0	0	1	1	0	0	0	0	2	2	0	0	5	5	AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110056	1	0.00	2.81	BADGERIN ROCK RD	26/4/06	han	20	0	1	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS WILD_RADISH SALT_AFFECTED_ROADSIDE
4110056	2	2.81	3.49	BADGERIN ROCK RD	26/4/06	han	20	3	0	2	2	2	2	1	1	2	2	1	1	8	10	WILD_OATS
4110056	3	3.49	4.17	BADGERIN ROCK RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	1	8	9	WILD_OATS
4110056	4	4.17	5.29	BADGERIN ROCK RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	9	9	WILD_OATS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110058	1	0.00	3.47	WALKER RD	24/4/06	han And al	20	1	1	2	2	2	2	1	1	2	2	1	1	10	10	WILD_OATS
4110059	1	0.00	2.40	KING RD	24/4/06	han and al	20	3	2	2	2	2	2	2	2	2	2	2	2	10	12	
4110059	2	2.40	2.82	KING RD	24/4/06	han and al	20	0	1	2	2	1	2	1	1	2	2	0	1	8	10	
4110060	1	0.00	3.12	LANG RD	18/4/06	marj	20	0	1	1	1	1	1	1	1	2	2	1	1	7	8	
4110061	1	0.00	0.70	LONGMUIR RD	14/4/06	longmuir	20	0	0	2	2	1	1	0	0	2	2	2	1	8	7	SALT_AFFECTED_ROADSIDE
4110061	2	1.80	2.40	LONGMUIR RD	14/4/06	longmuir	20	0	3	2	2	0	0	0	0	2	2	1	1	7	5	
4110062	1	0.00	2.06	SMITH RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	
4110063	1	0.00	1.90	SUMMER RD	20/4/06	lynne lesley	20	0	0	2	2	0	0	0	0	2	2	2	2	8	8	SALT_AFFECTED_ROADSIDE
4110063	2	1.90	2.79	SUMMER RD	20/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	2	2	2	2	9	9	
4110065	1	0.00	1.64	MELBIN RD	24/4/06	han and Al	20	1	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110065	2	1.64	2.87	MELBIN RD	24/4/06	han and Al	20	3	3	1	1	2	2	2	2	2	2	1	1	8	8	
4110066	1	0.00	3.13	AITKEN RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	2	2	2	2	2	2	2	1	12	11	WILD_RADISH WILD_OATS
4110067	1	0.00	2.05	BEST BYPASS RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	
4110067	2	2.05	2.50	BEST BYPASS RD	20/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	2	2	1	1	8	8	
4110067	3	2.50	3.00	BEST BYPASS RD	20/4/06	lynne lesley	20	0	0	2	2	2	2	2	2	2	2	2	1	10	11	
4110067	4	3.00	3.50	BEST BYPASS RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	8	10	
4110067	5	3.50	4.40	BEST BYPASS RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	2	2	8	8	WILD_RADISH

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110067	6	4.40	4.70	BEST BYPASS RD	20/4/06	lynne lesly	20	0	0	2	2	1	1	1	1	2	2	2	2	8	8	WILD_RADISH
4110067	7	4.70	7.00	BEST BYPASS RD	20/4/06	lynne lesly	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_RADISH
4110068	1	0.00	4.00	JAMESON RD	17/4/06	longmuir	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110070	1	0.00	2.10	ROSS RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	0	1	0	0	1	1	5	6	AFRICAN_LOVEGRASS WILD_OATS WILD_RADISH
4110070	2	2.10	2.70	ROSS RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	AFRICAN_LOVEGRASS WILD_OATS WILD_RADISH
4110071	1	0.00	2.00	LODGE RD	17/4/06	lesley lynne	20	0	0	2	2	0	0	0	0	0	0	1	1	5	5	WILD_RADISH WILD_OATS SAFFRON_THISTLE
4110071	2	2.00	3.70	LODGE RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_RADISH WILD_OATS SAFFRON_THISTLE
4110071	3	3.70	4.70	LODGE RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	1	1	0	2	2	2	8	10	WILD_RADISH WILD_OATS SAFFRON_THISTLE
4110073	1	0.00	0.90	HESFORD RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	
4110074	1	0.00	1.00	BROADHURST RD	1/5/06	han	20	0	0	2	2	2	2	2	2	2	2	0	1	10	10	
4110074	2	1.00	2.02	BROADHURST RD	1/5/06	han	20	1	1	2	2	2	2	2	2	2	2	1	1	10	10	
4110075	1	0.00	1.64	GREAVES RD	26/4/06	han	20	3	0	2	2	2	2	2	1	2	2	1	1	9	10	
4110076	1	0.00	0.50	SHARMAN RD	26/4/06	han	20	0	0	2	2	1	2	1	1	2	2	1	1	9	8	
4110076	2	0.50	1.61	SHARMAN RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110076	3	1.61	2.41	SHARMAN RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	
4110076	4	2.41	3.02	SHARMAN RD	26/4/06	han	20	0	0	2	1	1	0	1	0	2	2	0	0	8	5	WILD_OATS
4110076	5	3.02	4.20	SHARMAN RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	WILD_OATS
4110076	6	4.20	5.17	SHARMAN RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110076	7	5.17	8.78	SHARMAN RD	26/4/06	han	20	0	1	2	2	1	1	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110076	8	8.78	9.48	SHARMAN RD	26/4/06	han	20	3	3	2	2	2	2	1	1	2	2	2	2	9	9	SALT_AFFECTED_ROADSIDE
4110077	1	0.00	1.91	GREENHAM RD	16/4/06	GERRY & COLLEEN	20	0	0	0	2	0	1	0	2	0	1	0	2	2	10	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110078	1	0.00	1.75	BROOKS RD	17/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	0	0	7	7	WILD_OATS
4110080	1	0.00	1.50	WYALKATCHEM NORTH RD	20/4/06	lynne lesley	20	3	3	2	2	0	0	0	0	2	2	1	1	6	6	SALT_AFFECTED_ROADSIDE
4110081	1	0.00	1.34	COOKE EAST RD	17/4/06	lesley lynne	20	0	0	2	2	1	1	0	0	2	2	2	2	9	9	WILD_OATS SAFFRON_THISTLE AFRICAN_LOVEGRASS SALT_AFFECTED_ROADSIDE
4110081	2	1.34	3.69	COOKE EAST RD	17/4/06	lesley lynne	20	0	3	2	2	1	1	1	1	2	2	2	2	10	9	SALT_AFFECTED_ROADSIDE
4110082	1	0.00	1.47	MONINGARIN RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	10	9	
4110082	2	1.47	2.03	MONINGARIN RD	26/4/06	han	20	0	0	1	2	0	2	0	1	1	2	0	0	4	9	WILD_RADISH
4110082	3	2.03	3.56	MONINGARIN RD	26/4/06	han	20	0	0	2	2	0	1	1	1	2	2	0	1	7	9	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110082	4	3.56	5.36	MONINGARIN RD	26/4/06	han	20	3	0	2	2	2	2	2	2	2	2	1	1	9	11	WILD_RADISH WILD_OATS
4110083	1	0.00	1.44	BEATON RD	26/4/06	han	20	0	0	1	1	1	1	1	1	2	2	0	0	7	7	WILD_OATS SALT_AFFECTED_ROADSIDE
4110083	2	1.44	2.88	BEATON RD	26/4/06	han	20	3	3	0	0	1	1	1	1	2	2	0	0	5	5	WILD_OATS SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110086	1	0.00	1.80	LEEKE RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	WILD_RADISH WILD_OATS
4110086	2	1.80	2.80	LEEKE RD	20/4/06	lynne lesley	20	0	0	2	2	2	2	2	2	2	2	2	2	12	12	WILD_RADISH WILD_OATS
4110087	1	0.00	0.67	ALDRED RD	20/4/06	lynne lesley	20	1	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110087	2	0.67	1.78	ALDRED RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110087	3	1.78	2.28	ALDRED RD	20/4/06	lynne lesley	20	3	0	0	0	0	0	0	0	1	1	0	0	3	3	
4110087	4	2.28	4.28	ALDRED RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110088	1	0.00	1.05	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	2	2	1	1	2	2	1	1	9	9	
4110088	2	1.05	1.44	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	0	0	0	0	0	0	2	2	0	0	4	4	
4110088	3	1.44	2.46	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	1	1	1	1	1	1	2	2	1	1	8	8	
4110088	4	2.46	4.60	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	2	1	1	1	1	2	2	1	1	8	9	
4110088	5	4.60	5.29	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	1	1	1	0	1	0	2	2	1	0	8	5	
4110088	6	5.29	7.93	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110088	7	7.93	9.84	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	1	1	1	1	1	1	2	2	1	1	8	8	
4110088	8	9.84	11.50	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	0	1	1	0	0	0	0	1	1	0	0	4	4	
4110088	9	11.50	12.44	KULJA CENTRAL RD	18/4/06	marjkulja	20	0	1	2	1	1	1	1	1	2	2	1	1	9	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110088	10	12.44	12.70	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	2	2	1	1	1	1	2	2	1	1	8	9	
4110088	11	12.70	13.12	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	2	1	1	2	2	1	1	2	2	1	1	9	7	
4110088	12	13.12	14.90	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	1	1	1	1	2	2	1	1	6	8	
4110088	13	14.90	15.69	KULJA CENTRAL RD	18/4/06	marjkulja	20	2	1	1	1	2	2	1	1	2	2	1	1	7	9	
4110088	14	15.69	17.83	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	2	2	1	1	1	1	2	2	1	1	8	9	
4110088	15	17.83	18.20	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	1	1	0	0	2	2	1	1	5	7	
4110088	16	18.20	19.54	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	1	1	1	1	2	2	1	1	6	8	
4110088	17	19.54	19.75	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	2	2	1	1	1	1	2	2	1	1	7	9	
4110088	18	19.75	21.25	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110088	19	21.25	22.08	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	2	2	1	1	2	2	1	1	7	9	
4110088	20	22.08	23.23	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	1	1	1	1	2	2	1	1	7	8	
4110088	21	23.23	23.69	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	1	1	0	1	1	1	2	2	1	1	6	8	
4110088	22	23.69	26.99	KULJA CENTRAL RD	18/4/06	marjkulja	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110089	1	0.00	1.54	WATT RD	26/4/06	han	20	0	0	2	2	2	2	1	1	2	2	1	1	9	9	WILD_RADISH WILD_OATS
4110089	2	1.54	2.32	WATT RD	26/4/06	han	20	0	0	1	1	1	1	1	1	2	2	0	0	7	7	WILD_RADISH WILD_OATS
4110089	3	2.32	3.07	WATT RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	0	0	8	8	

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110089	4	3.07	8.99	WATT RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	WILD_RADISH WILD_OATS SALT_AFFECTED_ROADSIDE
4110103	1	0.00	2.14	WARREN RD	18/4/06	marj	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110103	2	2.14	8.49	WARREN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	8	
4110103	3	8.49	8.99	WARREN RD	18/4/06	marj	20	0	0	0	0	0	0	0	0	2	2	0	0	4	4	SALT_AFFECTED_ROADSIDE
4110103	4	8.99	11.44	WARREN RD	18/4/06	marj	20	0	0	0	0	0	0	0	0	0	2	0	0	2	4	SALT_AFFECTED_ROADSIDE
4110103	5	11.44	12.23	WARREN RD	18/4/06	marj	20	0	0	1	0	0	0	0	0	2	2	1	1	6	3	SALT_AFFECTED_ROADSIDE
4110103	6	12.23	12.56	WARREN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	6	
4110103	7	12.56	14.40	WARREN RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	0	8	7	
4110105	1	0.00	0.40	RIFLE RANGE RD	20/4/06	lynne lesley	20	0	3	2	2	1	1	1	1	2	2	1	2	9	8	SALT_AFFECTED_ROADSIDE
4110105	2	0.40	0.50	RIFLE RANGE RD	20/4/06	lynne lesley	20	0	0	1	1	0	0	0	0	2	2	0	0	5	5	SALT_AFFECTED_ROADSIDE
4110105	3	0.50	1.00	RIFLE RANGE RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110105	4	1.00	1.50	RIFLE RANGE RD	20/4/06	lynne lesley	20	3	3	2	2	1	1	1	1	2	2	2	2	8	8	SALT_AFFECTED_ROADSIDE
4110106	1	0.00	1.45	MIGHALL RD	20/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	2	2	1	1	9	9	
4110108	1	0.00	3.08	MAYES RD	24/4/06	hannah and alice	20	0	0	1	1	2	2	1	1	0	0	1	1	7	7	
4110108	2	3.08	4.03	MAYES RD	24/4/06	hannah and alice	20	0	0	2	2	2	2	1	1	2	2	1	1	10	10	
4110109	1	0.00	1.65	ENDOMOORE RD	24/4/06	han and al	20	1	1	2	2	2	2	1	1	2	2	2	2	11	9	
4110109	2	1.65	4.30	ENDOMOORE RD	24/4/06	han and al	20	1	3	2	2	2	2	2	2	2	2	2	2	10	10	SALT_AFFECTED_ROADSIDE
4110109	3	4.30	6.00	ENDOMOORE RD	24/4/06	han and al	20	0	3	2	2	1	1	1	1	2	2	2	2	10	8	SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110110	1	0.00	1.20	MOLLERIN SIDING ACCESS	24/4/06	hAn and al	20	0	0	0	1	1	1	1	2	2	0	0	6	7	SALT_AFFECTED_ROADSIDE	
4110114	1	0.00	0.70	MACTAGGART RD	20/4/06	lynne lesley	20	3	3	2	2	0	0	0	0	2	2	1	1	6	6	SALT_AFFECTED_ROADSIDE
4110114	2	0.70	2.49	MACTAGGART RD	20/4/06	lynne lesley	20	0	3	2	2	1	1	1	1	2	2	2	2	10	8	SALT_AFFECTED_ROADSIDE
4110115	1	0.00	0.93	MAY RD	26/4/06	han	20	0	3	2	1	2	2	1	1	2	2	1	1	10	7	WILD_OATS
4110115	2	0.93	2.73	MAY RD	26/4/06	han	20	0	0	2	2	1	1	1	1	2	2	1	1	8	8	WILD_OATS
4110116	1	0.00	1.50	RODNEY RD	17/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	2	2	2	2	8	10	
4110117	1	0.00	3.84	VINE RD	17/4/06	longmuir	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	
4110118	1	0.00	0.64	DAVIES RD	19/4/06	lynne lesley	20	3	0	2	0	1	0	1	0	2	2	2	0	9	4	
4110119	1	0.00	0.80	STORER RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	1	1	1	2	8	9	
4110119	2	0.80	2.40	STORER RD	16/4/06	GERRY & COLLEEN	20	0	0	2	2	1	1	1	1	2	2	2	2	10	10	WILD_OATS
4110122	1	0.00	1.32	CHOWN RD	26/4/06	hAN	20	0	3	2	2	0	2	1	1	2	2	0	2	9	7	
4110122	2	1.32	2.65	CHOWN RD	26/4/06	hAN	20	0	1	2	2	2	2	1	1	2	2	1	2	10	9	
4110122	3	2.65	3.62	CHOWN RD	26/4/06	hAN	20	2	2	1	1	2	2	1	1	2	2	1	1	8	8	
4110122	4	3.62	7.36	CHOWN RD	26/4/06	hAN	20	1	1	1	1	2	2	1	1	2	2	1	1	8	8	
4110122	5	7.36	8.82	CHOWN RD	26/4/06	hAN	20	0	0	2	2	2	2	1	1	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110124	1	0.00	2.26	ADAMS RD	18/4/06	marj	20	0	0	0	0	0	0	0	0	1	1	1	1	4	4	
4110124	2	2.26	3.44	ADAMS RD	18/4/06	marj	20	1	1	1	1	1	1	1	1	2	2	1	1	8	7	
4110125	1	0.00	2.58	LAWRENCE RD	19/4/06	lynne lesley	20	0	0	2	2	1	1	1	1	1	1	1	1	8	8	WILD_RADISH AFRICAN_LOVEGRASS
4110125	2	2.58	5.07	LAWRENCE RD	19/4/06	lynne lesley	20	0	0	1	1	1	1	1	1	2	2	0	1	7	7	WILD_RADISH AFRICAN_LOVEGRASS
4110125	3	5.07	6.25	LAWRENCE RD	19/4/06	lynne lesley	20	0	0	2	2	0	0	1	1	2	2	1	1	8	8	WILD_RADISH AFRICAN_LOVEGRASS

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
							(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	
4110127	1	0.00	2.40	REMLAP RD	24/4/06	Al and Han	20	1	1	2	2	2	2	2	2	2	1	1	10	10		
4110127	2	2.40	4.00	REMLAP RD	24/4/06	Al and Han	20	1	1	2	2	2	2	2	2	2	1	1	10	10		
4110127	3	4.00	6.40	REMLAP RD	24/4/06	Al and Han	20	1	1	2	2	2	2	1	1	2	2	1	1	10	10	WILD_OATS
4110127	4	6.40	10.12	REMLAP RD	24/4/06	Al and Han	20	1	1	2	2	1	1	1	1	2	2	1	1	9	9	WILD_OATS
4110127	5	10.12	13.51	REMLAP RD	24/4/06	Al and Han	20	1	1	2	2	1	2	1	1	2	2	1	1	9	10	
4110127	6	13.51	19.23	REMLAP RD	24/4/06	Al and Han	20	2	2	2	2	2	2	2	2	2	2	2	2	11	11	
4110128	1	0.00	1.90	SCOTSMAN RD	31/7/06	Hannah	20	1	1	2	2	1	1	1	1	2	2	1	0	8	7	
4110128	2	1.90	4.87	SCOTSMAN RD	31/7/06	Hannah		1	1	2	2	1	1	2	1	2	2	1	1	10	9	
4110128	3	4.87	7.21	SCOTSMAN RD	31/7/06	Hannah		1	1	2	2	2	2	1	1	2	2	1	1	9	9	
4110128	4	7.21	8.85	SCOTSMAN RD	31/7/06	Hannah		2	2	2	2	2	2	1	1	2	2	1	1	9	9	
4110128	5	8.85	10.00	SCOTSMAN RD	31/7/06	Hannah		2	0	2	2	2	1	2	1	2	2	1	0	9	8	
4110128	6	10.00	11.23	SCOTSMAN RD	31/7/06	Hannah		2	2	2	2	2	2	2	2	2	2	1	1	9	9	
4110128	7	11.23	12.82	SCOTSMAN RD	31/7/06	Hannah		0	2	1	2	0	1	1	2	1	2	0	1	4	9	WILD_OATS SALT_AFFECTED_ROADSIDE
4110128	8	12.82	16.53	SCOTSMAN RD	31/7/06	Hannah		2	2	2	2	2	2	2	2	2	2	1	1	9	9	SALT_AFFECTED_ROADSIDE
4110128	9	16.53	17.72	SCOTSMAN RD	31/7/06	Hannah		0	0	2	2	0	0	1	1	1	1	0	0	6	6	WILD_OATS
4110128	10	17.72	19.19	SCOTSMAN RD	31/7/06	Hannah		1	1	2	2	1	1	1	1	2	2	0	1	7	8	WILD_OATS
4110128	11	19.19	20.43	SCOTSMAN RD	31/7/06	Hannah		1	1	2	2	2	2	1	1	2	2	1	1	8	8	
4110128	12	20.43	23.76	SCOTSMAN RD	31/7/06	Hannah		2	2	2	2	2	2	2	2	2	2	2	2	10	10	SALT_AFFECTED_ROADSIDE
4110128	13	23.76	25.38	SCOTSMAN RD	31/7/06	Hannah		2	0	2	1	1	0	1	0	1	1	0	0	6	4	SALT_AFFECTED_ROADSIDE
4110128	14	25.38	26.85	SCOTSMAN RD	31/7/06	Hannah		1	1	1	1	0	0	0	0	1	1	0	0	4	4	WILD_OATS SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110129	1	0.00	0.78	MOIR RD	21/4/06	han	20	0	0	1	1	1	1	1	1	2	2	1	1	8	8	
4110135	1	0.00	1.00	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	3	0	2	2	1	1	1	1	2	2	2	2	9	9	AFRICAN_LOVEGRASS
4110135	2	1.00	2.00	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	0	0	2	2	0	0	0	0	1	1	0	0	4	5	AFRICAN_LOVEGRASS
4110135	3	2.00	2.40	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	0	0	2	2	1	1	1	1	1	1	2	2	9	9	AFRICAN_LOVEGRASS
4110135	4	2.40	7.75	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	3	0	2	2	2	0	2	0	2	1	2	1	12	6	AFRICAN_LOVEGRASS
4110135	5	7.75	8.85	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	0	0	2	2	0	0	0	0	1	1	0	0	5	5	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110135	6	8.85	9.95	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	0	0	2	2	0	0	1	1	1	1	2	2	8	8	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110135	7	9.95	10.95	WYALKATCHEM-KOORDA RD	17/4/06	lesley and lynne	20	0	0	2	2	0	0	0	0	1	1	0	0	5	5	AFRICAN_LOVEGRASS WILD_RADISH WILD_OATS
4110135	8	10.95	17.30	WYALKATCHEM-KOORDA RD	31/7/06	Hannah		0	0	1	1	0	0	0	0	0	0	0	0	3	3	WILD_RADISH WILD_OATS AFRICAN_LOVEGRASS
4110139	1	0	1.13	KOORDA-BULLFINCH RD	17/4/06	lesley	40	1	1	1	2	1	1	0	2	0	2	1	2	5	11	AFRICAN_LOVEGRASS WILD_OATS
4110139	2	1.13	2.26	KOORDA-BULLFINCH RD	17/4/06	lesley	40	0	0	2	2	1	1	1	1	2	2	2	2	10	10	AFRICAN_LOVEGRASS WILD_OATS
4110139	3	2.26	6.59	KOORDA-BULLFINCH RD	17/4/06	lesley	40	0	0	2	2	1	1	1	2	0	0	2	2	8	9	AFRICAN_LOVEGRASS WILD_OATS
4110139	4	6.59	10.72	KOORDA-BULLFINCH RD	17/4/06	lesley	40	0	0	2	2	0	0	1	1	2	2	2	2	9	9	AFRICAN_LOVEGRASS WILD_OATS
4110140	1	0.00	0.62	BURAKIN-WIALKI RD	21/4/06	han	20	2	0	1	1	2	1	1	0	2	2	1	0	7	6	
4110140	2	0.62	0.97	BURAKIN-WIALKI RD	21/4/06	han	20	0	0	1	1	0	1	0	0	1	1	0	0	3	5	WILD_RADISH WILD_OATS CALTROP CALTROP

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110140	3	0.97	2.15	BURAKIN-WIALKI RD	21/4/06	han	20	0	0	1	1	0	1	0	0	2	2	0	1	4	7	WILD_RADISH
4110140	4	2.15	3.95	BURAKIN-WIALKI RD	21/4/06	han	20	0	1	1	1	1	1	1	1	2	2	1	1	7	8	WILD_RADISH
4110140	5	3.95	4.61	BURAKIN-WIALKI RD	21/4/06	han	20	3	3	0	0	0	0	0	0	0	0	0	0	1	2	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110140	6	4.61	5.20	BURAKIN-WIALKI RD	21/4/06	han	20	2	1	2	2	1	1	1	0	2	1	1	1	7	6	WILD_RADISH AFRICAN_LOVEGRASS WILD_OATS
4110140	7	5.20	5.61	BURAKIN-WIALKI RD	21/4/06	han	20	0	1	0	2	0	1	0	1	0	2	0	1	2	8	WILD_RADISH CALTROP AFRICAN_LOVEGRASS WILD_OATS
4110140	8	5.61	6.16	BURAKIN-WIALKI RD	21/4/06	han	20	1	1	2	1	1	1	1	1	2	2	1	1	9	8	WILD_RADISH AFRICAN_LOVEGRASS
4110140	9	6.16	10.98	BURAKIN-WIALKI RD	21/4/06	han	20	0	1	2	2	1	2	1	2	2	2	1	1	9	11	AFRICAN_LOVEGRASS
4110140	10	10.98	11.27	BURAKIN-WIALKI RD	21/4/06	han	20	1	1	2	2	1	1	1	1	2	2	1	1	9	8	AFRICAN_LOVEGRASS
4110140	11	11.27	17.17	BURAKIN-WIALKI RD	21/4/06	han and al	20	0	0	1	1	1	1	1	1	2	2	1	1	8	8	WILD_OATS
4110140	12	17.17	21.37	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	2	2	1	1	1	1	2	2	0	0	8	7	WILD_OATS SALT_AFFECTED_ROADSIDE
4110140	13	21.37	24.97	BURAKIN-WIALKI RD	21/4/06	han and al	20	3	3	2	2	2	2	1	1	2	2	1	1	9	9	AFRICAN_LOVEGRASS WILD_OATS
4110140	14	24.97	26.37	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	2	2	1	1	1	0	2	1	0	0	7	5	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE
4110140	15	26.37	29.37	BURAKIN-WIALKI RD	21/4/06	han and al	20	0	0	1	1	0	0	0	0	1	1	0	0	3	3	AFRICAN_LOVEGRASS WILD_OATS SALT_AFFECTED_ROADSIDE

ROAD #	SECT #	OD Start	OD Finish	ROAD NAME	Date	Observer	Width Road Res	Width of Veg Roadside		Native Veg Layers		Extent of Native Veg		Number of Species		Weed Presence		Value as a Biological Corridor		Conservation Value Score (0-12)		FINAL OVERLAYS (Listed if Present)
								(m)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	
4110140	16	29.37	31.17	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	2	2	1	1	1	1	2	2	1	0	8	7	AFRICAN_LOVEGRASS WILD_OATS
4110140	17	31.17	31.33	BURAKIN-WIALKI RD	21/4/06	han and al	20	0	0	1	0	1	1	1	1	2	2	0	0	6	5	AFRICAN_LOVEGRASS WILD_OATS
4110140	18	31.33	33.63	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	2	2	1	1	2	1	2	2	1	1	9	8	
4110140	19	33.63	35.98	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	2	2	1	1	1	1	1	1	0	0	7	7	WILD_OATS WILD_RADISH
4110140	20	35.98	36.63	BURAKIN-WIALKI RD	21/4/06	han and al	20	1	1	1	2	1	1	0	0	1	1	0	0	5	5	WILD_RADISH WILD_RADISH AFRICAN_LOVEGRASS

Appendix

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APPENDIX 3

Road names and lengths: Shire of Koorda

(Source- Main Roads WA 2004)

Road # (MRWA)	Road Name	Length (km)
4110124	ADAMS RD	3.44
4110066	AITKEN RD	3.13
4110136	AITKEN RD	0.42
4110104	AITKEN ST	1.11
4110087	ALDRED RD	4.28
4110091	ALLENBY ST	0.70
4110019	ANDERSON RD	30.09
4110084	ARROW RD	2.98
4110056	BADGERIN ROCK RD	5.29
4110083	BEATON RD	2.88
4110067	BEST BYPASS RD	8.67
4110032	BEST RD	15.65
4110102	BEST ST	0.29
4110096	BIRDWOOD ST	0.49
4110036	BLACK RD	29.35
4110007	BOORALAMING-KULJA RD	50.54
4110051	BOWMAN RD	2.24
4110126	BOYNE RD	3.10
4110074	BROADHURST RD	2.02
4110078	BROOKS RD	1.75
4110121	BROOKS ST	0.21
4110064	BUNKETCH EAST RD	2.28
4110041	BUNKETCH-KULJA RD	3.78
4110040	BURAKIN EAST RD	3.37
4110140	BURAKIN-WIALKI RD	36.63
4110029	BURTON RD	14.74
4110038	BURTON SOUTH RD	3.68
4110026	CHAPMAN RD	6.47
4110122	CHOWN RD	8.82
4110034	CHOWN TANK RD	14.43
4110043	COLLINS RD	5.18
4110008	COMMONWEALTH RD	33.78
4110081	COOKE EAST RD	3.69
4110027	COOPER RD	9.10
4110049	CORNISH RD	5.35
4110118	DAVIES RD	0.64
4110057	DINGO RD	6.15
4110046	DOWNIE RD	3.60
4110011	DUKIN WEST RD	17.27
4110015	EAST BOUNDARY RD	48.51
4110109	ENDOMOORE RD	6.51
4110030	GRAVES RD	7.37
4110075	GREAVES RD	1.64
4110052	GREEN RD	2.24
4110077	GREENHAM RD	1.91
4110098	GREENHAM ST	0.62
4110053	GRIFFITH RD	2.38
4110138	HAIG ST	0.96
4110031	HAWKINS RD	10.64
4110054	HENNING RD	4.09
4110073	HESFORD RD	3.71
4110112	HOLLINS RD	6.94

Road # (MRWA)	Road Name	Length (km)
4110021	INMAN RD	10.47
4110113	JACK RD	1.17
4110068	JAMESON RD	4.00
4110006	KALANNIE-KULJA RD	14.33
4110059	KING RD	2.82
4110028	KIRWAN EAST RD	10.56
4110009	KOORDA NORTH WEST RD	25.54
4110123	KOORDA RD	0.09
4110003	KOORDA-DOWERIN RD	24.78
4110004	KOORDA-KULJA RD	40.90
4110001	KOORDA-MOLLERIN RD	43.73
4110088	KULJA CENTRAL RD	26.79
4110020	KULJA-MOLLERIN ROCK RD	27.16
4110079	LACKMAN RD	0.73
4110025	LAMB RD	10.69
4110060	LANG RD	3.12
4110050	LARKMAN RD	2.22
4110125	LAWRENCE RD	6.25
4110086	LEEKE RD	3.40
4110071	LODGE RD	5.22
4110101	LODGE ST	0.30
4110061	LONGMUIR RD	2.40
4110114	MACTAGGART RD	2.49
4110014	MAHER RD	13.60
4110013	MARGARETTE RD	18.80
4110017	MARTIN RD	16.61
4110115	MAY RD	2.76
4110108	MAYES RD	4.04
4110065	MELBIN RD	2.87
4110106	MIGHALL RD	1.45
4110129	MOIR RD	2.07
4110012	MOLLERIN NORTH RD	14.26
4110010	MOLLERIN ROCK SOUTH RD	36.85
4110110	MOLLERIN SIDING ACCESS RD	1.20
4110069	MOLLERIN SIDING RD	3.06
4110111	MOLLERIN ST	0.48
4110033	MONINGARIN EAST RD	7.74
4110082	MONINGARIN RD	5.36
4110047	MONTAGUE RD	2.55
4110131	MORTON WY	0.08
4110016	MULJI RD	8.96
4110035	NARKAL NORTH RD	7.15
4110022	NARKAL RD	5.71
4110039	NEWCARLBEON RD	4.65
4110120	NINGHAN ST	0.50
4110037	ORCHARD RD	7.79
4110094	ORCHARD ST	0.45
4110044	OVENS RD	4.16
4110130	PEARMAN ST	0.18
4110055	POSSELT RD	6.60
4110023	RABBIT PROOF FENCE RD	11.92
4110132	RAE ST	0.34
4110100	RAILWAY SOUTH ST	0.15
4110137	RAILWAY ST	0.74
4110127	REMLAP RD	26.41
4110048	REMNANT RD	2.40
4110105	RIFLE RANGE RD	1.58
4110116	RODNEY RD	1.53
4110070	ROSS RD	2.70

Road # (MRWA)	Road Name	Length (km)
4110024	SANDPHIRE RD	12.70
4110128	SCOTSMAN RD	26.85
4110093	SCOTT ST	0.74
4110076	SHARMAN RD	9.48
4110133	SKINNER ST	0.04
4110099	SMITH NORTH ST	0.20
4110062	SMITH RD	2.06
4110090	SMITH ST SOUTH	0.63
4110085	STOCKYARD RD	1.25
4110119	STORER RD	2.30
4110018	STRAHAN RD	15.85
4110063	SUMMER RD	2.79
4110097	THOMAS ST	0.18
4110107	THORNTON RD	4.18
4110134	UN-NAMED	0.27
4110117	VINE RD	3.84
4110058	WALKER RD	3.47
4110103	WARREN RD	14.40
4110072	WATER SUPPLY RD	1.87
4110089	WATT RD	8.99
4110045	WILSON RD	3.91
4110002	WONGAN HILLS-KOORDA RD	21.73
4110080	WYALKATCHEM NORTH RD	2.67
4110135	WYALKATCHEM-SOUTHERN CROSS RD	17.30
4110139	WYALKATCHEM-SOUTHERN CROSS RD	10.72

Appendix

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APPENDIX 4

Flora species in the Shire of Koorda

(Source- WA Herbarium)

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

* = Weed species

P = Priority species

R = Rare species

THIS DATA HAS BEEN PROVIDED BY THE WESTERN AUSTRALIAN HERBARIUM ON 17 July 2006.

Acacia ? *jennerae*
Acacia ? *nigripilosa*
Acacia Plurinerves Phyllodes 8-nerved, terete/flat
(fragilis group)
Acacia acuaria W.Fitzg.
Acacia aculeiformis Maslin
Acacia acuminata Benth.
Acacia aestivalis E.Pritz.
Acacia ancistrophylla C.R.P.Andrews var.
ancistrophylla
Acacia andrewsii W.Fitzg.
Acacia anthochaera Maslin
Acacia assimilis S.Moore
Acacia assimilis S.Moore subsp. *assimilis*
Acacia beauverdiana Ewart & Sharman
Acacia brumalis Maslin
Acacia colletioides Benth.
Acacia consanguinea R.S.Cowan & Maslin
Acacia coolgardiensis Maiden subsp.
coolgardiensis
Acacia cylindrica R.S.Cowan & Maslin P3
Acacia daphnifolia Meisn.
Acacia deficiens Maslin
Acacia dielsii E.Pritz.
Acacia dissona var. *indoloria* R.S.Cowan &
Maslin P3
Acacia duriuscula W.Fitzg.
Acacia enervia subsp. *explicata* R.S.Cowan &
Maslin
Acacia ephedroides Benth.
Acacia eremaea C.R.P.Andrews
Acacia eremophila var. *variabilis* Maiden &
Blakely P3
Acacia eremophila W.Fitzg. var. *eremophila*
Acacia erinacea Benth.
Acacia fragilis Maiden & Blakely
Acacia gibbosa R.S.Cowan & Maslin
Acacia graniticola Maslin
Acacia hemiteles Benth.
Acacia heteroneura var. *jutsonii* (Maiden)
R.S.Cowan & Maslin

Acacia heteroneura var. *petila* R.S.Cowan &
Maslin
Acacia inceana subsp. *conformis* R.S.Cowan &
Maslin
Acacia jennerae Maiden
Acacia jibberdingensis Maiden & Blakely
Acacia kalgoorliensis R.S.Cowan & Maslin
Acacia ligustrina Meisn.
Acacia lineolata Benth. subsp. *lineolata*
Acacia longiphyllodinea Maiden
Acacia longispinea Morrison
Acacia mackeyana Ewart & Jean White
Acacia merinthophora E.Pritz.
Acacia merrallii F.Muell.
Acacia multispicata Benth.
Acacia neurophylla subsp. *erugata* R.S.Cowan &
Maslin
Acacia neurophylla W.Fitzg.
Acacia neurophylla W.Fitzg. subsp. *neurophylla*
Acacia nigripilosa Maiden
Acacia nigripilosa Maiden subsp. *nigripilosa*
Acacia nyssophylla F.Muell.
Acacia obtecta Maiden & Blakely
Acacia prainii Maiden
Acacia resinimarginea W.Fitzg.
Acacia restiacea Benth.
Acacia sessilispica Maiden & Blakely
Acacia sibina Maslin
Acacia sp. Kalannie (B.R. Maslin 7706) PN
Acacia sp. Kalannie North East (B.R. Maslin
7519) PN P1
Acacia sp. Merredin (B.R. Maslin 586) PN
Acacia sp. Mullewa (B.R. Maslin 4269) PN
Acacia sp. Petrudor Rocks (B.R. Maslin 7714) PN
P1
Acacia sp. narrow phyllode (B.R. Maslin 7831) PN
Acacia stanleyi Maslin ms P1
Acacia stereophylla Meisn. var. *stereophylla*
Acacia tetragonophylla F.Muell.
Acacia ulicina Meisn.
Acacia victoriae Benth.
Acacia yorkkrakinensis subsp. *acrita* R.S.Cowan &
Maslin
Actinobole uliginosum (A.Gray) H.Eichler
Actinotus superbus O.H.Sarg.
Allocasuarina acutivalvis (F.Muell.) L.A.S.Johnson

Allocasuarina acutivalvis (F.Muell.) L.A.S.Johnson
 subsp. *acutivalvis*
Allocasuarina campestris (Diels) L.A.S.Johnson
Allocasuarina corniculata (F.Muell.)
 L.A.S.Johnson
Alyogyne pinoniana (Gaudich.) Fryxell
Alyxia buxifolia R.Br.
 **Ambrosia psilostachya* DC.
Amphipogon caricinus F.Muell. var. *caricinus*
Amphipogon turbinatus R.Br.
Andersonia lehmanniana subsp. *pubescens*
 (Sond.) L.Watson
Angianthus micropodioides (Benth.) Benth. P3
Angianthus sp.
Angianthus tomentosus J.C.Wendl.
Anigozanthos humilis Lindl. subsp. *humilis*
Anthocercis anisantha Endl. subsp. *anisantha*
Anthotroche pannosa Endl.
Aphelia brizula F.Muell.
 **Arctotheca calendula* (L.) Levyns
Argyrolottis turbinata Turcz.
Aristida contorta F.Muell.
Arthropodium dyeri (Domin) Brittan
 **Asphodelus fistulosus* L.
Astartea heteranthera C.A.Gardner
Asteridea atrixioides (Sond. & F.Muell.) Kroner
Astroloma serratifolium (DC.) Druce
Atriplex bunburyana F.Muell.
Atriplex holocarpa F.Muell.
Atriplex hymenotheca Moq.
Atriplex paludosa R.Br.
Atriplex sp.
Atriplex stipitata Benth.
Atriplex suberecta I.Verd.
Austrodanthonia caespitosa (Gaudich.)
 H.P.Linder
Austrodanthonia sp. *Goomalling* (A.G. Gunness et
 al. OAKP 10/63) PN
Austrostipa elegantissima (Labill.) S.W.L.Jacobs
 & J.Everett
Austrostipa flavescens (Labill.) S.W.L.Jacobs &
 J.Everett
Austrostipa hemipogon (Benth.) S.W.L.Jacobs &
 J.Everett
Austrostipa nitida (Summerh & C.E.Hubb)
 S.W.L.Jacobs & J.Everett
Austrostipa platychaeta (Hughes) S.W.L.Jacobs &
 J.Everett
Austrostipa sp.
Austrostipa variabilis (Hughes) S.W.L.Jacobs &
 J.Everett
 **Avena barbata* Link
 **Avena fatua* L.

Baeckea benthamii Trudgen ms
Baeckea crispiflora var. *tenuior* Ewart

Baeckea crispiflora F.Muell.
Baeckea cryptonoma Trudgen ms
Baeckea elderiana E.Pritz.
Baeckea megaflorea Trudgen ms
Baeckea muricata C.A.Gardner
Baeckea sp. Bencubbin-Koorda (M.E. Trudgen
 5421) PN
Balaustion pulcherrimum Hook.
Banksia benthamiana C.A.Gardner P4
Beaufortia bracteosa Diels
Beaufortia interstans F.Muell.
Beaufortia micrantha Schauer
Beyeria brevifolia var. *robustior* Airy Shaw
Billardiera coriacea Benth.
Blennospora drummondii A.Gray
Blennospora phlegmatocarpa (Diels) P.S.Short
 P3
Boronia coerulescens subsp. *spicata* Paul
 G.Wilson
Boronia coerulescens subsp. *spinescens*
 (Benth.) Paul G.Wilson
Boronia fabianoides subsp. *rosea* Paul G.Wilson
Boronia ternata Endl. var. *ternata*
Borya constricta Churchill
Borya sphaerocephala R.Br.
Brachyscome ciliaris (Labill.) Less.
Brachyscome iberidifolia Benth.
Brachyscome pusilla Steetz
Brachysola coerulea (F.Muell. & Tate) Rye
 **Brassica tournefortii* Gouan
 **Bromus ? rubens*
Bromus arenarius Labill.
 **Bromus rubens* L.
Brunonia australis R.Br.
Bursaria occidentalis E.M.Benn.

Caladenia incensa Hopper & A.P.Br.
Caladenia pendens Hopper & A.P.Br. subsp.
pendens
Caladenia radialis R.S.Rogers
Caladenia remota Hopper & A.P.Br. subsp.
remota
Caladenia roei Benth.
Calandrinia calyptrata Hook.f.
Calandrinia eremaea Ewart
Calandrinia granulifera Benth.
Callitris glaucophylla Joy Thomps. &
 L.A.S.Johnson
Calothamnus gilesii F.Muell.
Calothamnus quadrifidus R.Br.
Calotis hispidula (F.Muell.) F.Muell.
Calycopeplus paucifolius (Klotzsch) Baill.
Calytrix depressa (Turcz.) Benth.
Calytrix gracilis Benth.
Calytrix leschenaultii (Schauer) Benth.
Calytrix plumulosa (F.Muell.) B.D.Jacks. P3

Calytrix sapphirina Lindl.
Calytrix violacea (Lindl.) Craven
Candelariella xanthostigmoides (Müll. Arg.) R.W. Rogers
**Carthamus lanatus* L.
Cassylia nodiflora Meisn.
**Centaurea melitensis* L.
Centrolepis aristata (R.Br.) Roem. & Schult.
Cephalopterum drummondii A.Gray
**Cerastium glomeratum* Thuill.
Ceratogyne obionoides Turcz.
Cercosporidium graminis
Chamaexeros fimbriata (F.Muell.) Benth.
Chamelaucium drummondii subsp. *hallii* (Ewart) N.G.Marchant & Keighery ms
Chamelaucium drummondii Meisn.
Chamelaucium micranthum (Turcz.) Domin
Chamelaucium pauciflorum subsp. *thryptomenioides* (D.A.Herb.) N.G.Marchant & Keighery ms
Cheilanthes sieberi Kunze subsp. *sieberi*
**Chloris virgata* Sw.
Chondropyxis halophila D.A.Cooke
Chrysitrix distigmatica C.B.Clarke
Chrysocephalum apiculatum (Labill.) Steetz
Chthonocephalus pseudevax Steetz
Cladia ? corallaizon
Clematis delicata W.T.Wang
**Cleretum papulosum* (L.f.) L.Bolus
**Cleretum papulosum* (L.f.) L.Bolus subsp. *papulosum*
Codonocarpus cotinifolius (Desf.) F.Muell.
Comesperma drummondii Steetz
Comesperma integerrimum Endl.
Comesperma scoparium Steetz
Commersonia pulchella Turcz.
Conospermum brownii Meisn.
Conospermum stoechadis Endl. subsp. *stoechadis*
Conostylis aculeata subsp. *bromelioides* (Endl.) J.W.Green
Conostylis prolifera Benth.
Convolvulus angustissimus R.Br. subsp. *angustissimus*
Cotula cotuloides (Steetz) Druce
Crassula colorata var. *acuminata* (Reader) Toelken
Crassula exserta (Reader) Ostenf.
Cryptandra apetala var. *anomala* Rye
Cryptandra apetala Ewart & Jean White var. *apetala*
Cryptandra pungens Steud.
Cryptandra sp.
**Cucumis myriocarpus* Naudin
Cuscuta sp.
Cyanicula amplexans (A.S.George) Hopper & A.P.Br.
Cyanostegia angustifolia Turcz.
Cyanostegia microphylla S.Moore
Cyphanthera microphylla Miers
Cyphanthera odgersii subsp. *occidentalis* Haegi R
Cyphanthera odgersii (F.Muell.) Haegi subsp. *odgersii*
Dampiera eriocephala de Vriese
Dampiera juncea Benth.
Dampiera lavandulacea Lindl.
Dampiera linearis R.Br.
Dampiera luteiflora F.Muell.
Dampiera sacculata Benth.
Dampiera sp.
Dampiera stenostachya E.Pritz.
Dampiera tenuicaulis E.Pritz. var. *tenuicaulis*
Dampiera wellsiana F.Muell.
Darwinia diosmoides (DC.) Benth.
Darwinia purpurea (Endl.) Benth.
Daviesia benthamii Meisn. subsp. *benthamii*
Daviesia hakeoides subsp. *subnuda* (Benth.) Crisp
Daviesia nematophylla Benth.
Daviesia nudiflora subsp. *amplectens* Crisp
Daviesia nudiflora Meisn. subsp. *nudiflora*
Dianella revoluta R.Br.
Dicrastylis globiflora (Endl.) Rye
Dicrastylis parvifolia F.Muell.
Dicrastylis rugosifolia (Munir) Rye
Didymanthus roei Endl.
Diploschistes hensseniae Lumbsch & Elix
Disphyma crassifolium subsp. *clavellatum* (Haw.) Chinnock
Diuris recurva D.L.Jones P4
Dodonaea adenophora Miq.
Dodonaea bursariifolia F.Muell.
Dodonaea caespitosa Diels
Dodonaea inaequifolia Turcz.
Dodonaea larreoides Turcz.
Dodonaea stenozyga F.Muell.
Dodonaea viscosa subsp. *angustissima* (DC.) J.G.West
Dodonaea viscosa subsp. *spatulata / angustissima*
Drosera andersoniana Ewart & Jean White
Drosera glanduligera Lehm.
Drosera macrantha Endl.
Drosera macrantha Endl. subsp. *macrantha*
Drosera microphylla Endl.
Drummondita hassellii (F.Muell.) Paul G.Wilson
Dryandra fraseri R.Br. var. *fraseri*
Dryandra purdieana Diels
Duboisia hopwoodii (F.Muell.) F.Muell.
Ecdeiocolea monostachya F.Muell.

**Echium plantagineum* L.
**Emex australis* Steinh.
Enchylaena lanata Paul G.Wilson
Enchylaena tomentosa R.Br.
Enekbatus clavifolius (S.Moore) Trudgen & Rye ms
Enekbatus sessilis Trudgen & Rye ms
Enekbatus stowardii (S.Moore) Trudgen & Rye ms
Eragrostis dielsii Pilg.
Eragrostis sp.
Eremaea beaufortoides Benth.
Eremaea pilosa
Eremophila aff. *sargentii*
Eremophila caperata Chinnock ms
Eremophila clarkei A.F.Oldfield & F.Muell.
Eremophila decipiens Ostenf.
Eremophila decipiens Ostenf. subsp. *decipiens* ms
Eremophila deserti (Benth.) Chinnock
Eremophila drummondii F.Muell.
Eremophila glabra subsp. *albicans* (Bartl.) Chinnock
Eremophila glabra subsp. *elegans* Chinnock ms
Eremophila granitica S.Moore
Eremophila lehmanniana (Lehm.) Chinnock
Eremophila miniata C.A.Gardner
Eremophila oldfieldii subsp. *angustifolia* (S.Moore) Chinnock ms
Eremophila papillata Chinnock ms
Eremophila resinosa (Endl.) F.Muell. R
Eremophila sargentii (S.Moore) Chinnock P2
Eremophila serrulata (A.DC.) Druce
Eremophila sp.
Eremophila subfloccosa Benth. subsp. *subfloccosa*
Eremophila viscida Endl. R
Eremophila woolsiana var. *dentata*
Eriachne ovata Nees
Eriochiton sclerolaenoides (F.Muell.) A.J.Scott
**Erodium botrys* (Cav.) Bertol.
**Erodium cicutarium* (L.) L'Her.
Erodium cygnorum Nees
**Erodium moschatum* (L.) L'Her.
Erymophyllum ramosum (A.Gray) Paul G.Wilson
Erymophyllum tenellum (Turcz.) Paul G.Wilson
Eucalyptus aff. *obtusiflora*
Eucalyptus astringens x *loxophleba* subsp. *loxophleba*
Eucalyptus brachycorys Blakely
Eucalyptus calycogona Turcz.
Eucalyptus capillosa Brooker & Hopper subsp. *capillosa*
Eucalyptus celastroides subsp. *virella* Brooker
Eucalyptus ceratocorys (Blakely) L.A.S.Johnson & K.D.Hill

Eucalyptus cf. *dolichocera*
Eucalyptus erythronema var. *marginata* (Benth.) Domin
Eucalyptus ewartiana Maiden
Eucalyptus gardneri Maiden subsp. *gardneri*
Eucalyptus horistes L.A.S.Johnson & K.D.Hill
Eucalyptus incrassata Labill.
Eucalyptus kochii subsp. *plenissima* (C.A.Gardner) Brooker
Eucalyptus kochii Maiden & Blakely subsp. *kochii*
Eucalyptus leptopoda subsp. *arctata* L.A.S.Johnson & K.D.Hill
Eucalyptus longicornis (F.Muell.) Maiden
Eucalyptus loxophleba subsp. *lissophloia* L.A.S.Johnson & K.D.Hill
Eucalyptus loxophleba subsp. *supralaevis* L.A.S.Johnson & K.D.Hill
Eucalyptus loxophleba Benth. subsp. *loxophleba*
Eucalyptus loxophleba x *occidentalis*
Eucalyptus moderata L.A.S.Johnson & K.D.Hill
Eucalyptus myriadena Brooker
Eucalyptus myriadena Brooker subsp. *myriadena*
Eucalyptus obtusiflora DC.
Eucalyptus oldfieldii F.Muell.
Eucalyptus orthostemon Nicolle & Brooker ms
Eucalyptus petraea D.J.Carr & S.G.M.Carr
Eucalyptus rigidula Maiden
Eucalyptus salicola Brooker
Eucalyptus salmonophloia F.Muell.
Eucalyptus salubris F.Muell.
Eucalyptus sargentii Maiden subsp. *sargentii*
Eucalyptus sheathiana Maiden
Eucalyptus stowardii Maiden
Eucalyptus subangusta subsp. *pusilla* Brooker & Hopper
Eucalyptus subangusta (Blakely) Brooker & Hopper subsp. *subangusta*
Eucalyptus synandra subsp. (wheatbelt) A.S. George 16203)
Eucalyptus synandra Crisp
Eucalyptus tenera L.A.S.Johnson & K.D.Hill
Eucalyptus wubinensis L.A.S.Johnson & K.D.Hill
Eucalyptus yilgarnensis (Maiden) Brooker
Euryomyrtus maidenii (Ewart & Jean White) Trudgen
Euryomyrtus recurva Trudgen P3
Exocarpos aphyllus R.Br.

Fitzwillia axilliflora (Ewart & Jean White) P.S.Short P2
Frankenia sp.
Funaria hygrometrica

**Galium aparine* L.
Gastrolobium bennettsianum C.A.Gardner
Gastrolobium floribundum S.Moore

Gastrolobium trilobum Benth.
Geastrum sp.
Gilberta tenuifolia Turcz.
Glischrocaryon aureum var. *angustifolium* (Nees)
Orchard
Glischrocaryon aureum (Lindl.) Orchard
Glischrocaryon flavescens (Hook.) Orchard
Glycine canescens F.J.Herm.
Gnephosis angianthoides (Steetz) Anderb.
Gnephosis tenuissima Cass.
Gnephosis trifida P.S.Short
Gnephosis uniflora (Turcz.) P.S.Short
Gompholobium gompholobioides (F.Muell.) Crisp
Gonocarpus confertifolius (F.Muell.) Orchard
Gonocarpus nodulosus Nees
Goodenia berardiana (Gaudich.) Carolin
Goodenia dyeri K.Krause
Goodenia helmsii (E.Pritz.) Carolin
Goodenia perryi Carolin P3
Goodenia pinifolia de Vriese
Goodenia pusilliflora F.Muell.
Goodenia watsonii F.Muell. & Tate subsp.
watsonii
Grevillea acacioides McGill.
Grevillea acuaria Benth.
Grevillea armigera Meisn.
Grevillea didymobotrya Meisn. subsp.
didymobotrya
Grevillea eremophila (Diels) Olde & Marriott
Grevillea eriobotrya F.Muell. P3
Grevillea eryngioides Benth.
Grevillea excelsior Diels
Grevillea hakeoides subsp. *stenophylla* (W.Fitzg.)
McGill.
Grevillea hakeoides Meisn. subsp. *hakeoides*
Grevillea haplantha subsp. *recedens* Olde &
Marriott P3
Grevillea hookeriana subsp. *digitata* (F.Muell.)
Makinson
Grevillea hookeriana Meisn. subsp. *hookeriana*
Grevillea huegelii Meisn.
Grevillea integrifolia (Endl.) Meisn.
Grevillea levis Olde & Marriott
Grevillea nana C.A.Gardner subsp. *nana*
Grevillea paniculata Meisn.
Grevillea paradoxa F.Muell.
Grevillea petrophiloides Meisn. subsp.
petrophiloides
Grevillea pterosperma F.Muell.
Grevillea rosieri McGill. P2
Grevillea teretifolia Meisn.
Grevillea yorkkrakinensis C.A.Gardner
Guichenotia micrantha (Steetz) Benth.
Gunniopsis intermedia Diels
Gunniopsis quadrifida (F.Muell.) Pax
Gunniopsis septifraga (F.Muell.) Chinnock

Gyrostemon racemiger H.Walter
Gyrostemon reticulatus A.S.George R
Gyrostemon subnudus (Nees) Baill.

Hakea erecta Lamont
Hakea francisiana F.Muell.
Hakea incrassata R.Br.
Hakea invaginata B.L.Burt
Hakea kippistiana Meisn.
Hakea lissocarpha R.Br.
Hakea meisneriana Kippist
Hakea minyma Maconochie
Hakea platysperma Hook.
Hakea preissii Meisn.
Hakea prostrata R.Br.
Hakea recurva Meisn. subsp. *recurva*
Hakea scoparia Meisn. subsp. *scoparia*
Hakea stenocarpa R.Br.
Hakea trifurcata (Sm.) R.Br.
Halgania anagalloides Endl. var. *anagalloides* ms
Halgania lavandulacea Endl.
Halosarcia cf. *undulata*
Halosarcia halocnemoides subsp. Lake Grace
(N. Casson G231. 10) PN
Halosarcia halocnemoides subsp. *catenulata*
Paul G.Wilson
Halosarcia halocnemoides subsp. *Catenulate*
(glaucous variant)
Halosarcia halocnemoides subsp. *caudata* Paul
G.Wilson
Halosarcia halocnemoides (Nees) Paul G.Wilson
Halosarcia halocnemoides (Nees) Paul G.Wilson
subsp. *halocnemoides*
Halosarcia indica subsp. *bidens* (Nees) Paul
G.Wilson
Halosarcia lepidosperma Paul G.Wilson
Halosarcia leptoclada subsp. *inclusa* Paul
G.Wilson
Halosarcia lylei (Ewart & Jean White) Paul
G.Wilson
Halosarcia peltata Paul G.Wilson
Halosarcia pergranulata (J.M.Black) Paul
G.Wilson subsp. *pergranulata*
Halosarcia sp. Lake Moore (M.N. Lyons 2603) PN
Halosarcia syncarpa Paul G.Wilson
Harmsiodoxa brevipes (F.Muell.) O.E.Schulz var.
brevipes
Helichrysum leucopsidium DC.
Hemigenia dielsii (Hemsl.) C.A.Gardner
Hemigenia sp.
Hemigenia sp. Merredin (M. Koch 2959) PN
Hemigenia westringioides Benth.
Heterodea muelleri (Hampe) Nyl.
Hibbertia ancistrophylla J.R.Wheeler
Hibbertia arcuata J.R.Wheeler
Hibbertia eatoniae Diels

Hibbertia exasperata (Steud.) Briq.
Hibbertia glomerosa (Benth.) F.Muell.
Hibbertia glomerosa (Benth.) F.Muell. var. *glomerosa*
Hibbertia gracilipes Benth.
Hibbertia lividula J.R.Wheeler
Hibbertia rupicola (S.Moore) C.A.Gardner
Hibbertia sp.
Hibbertia stenophylla J.R.Wheeler
Homalocalyx coarctatus (F.Muell.) Craven
Homalocalyx thryptomenoides (F.Muell.) Craven
**Hordeum glaucum* Steud.
**Hornungia procumbens* (L.) Hayek
Hyalochlamys globifera A.Gray
Hyalosperma cotula (Benth.) Paul G.Wilson
Hyalosperma glutinosum Steetz subsp. *glutinosum*
Hyalosperma stoveae (D.A.Cooke) Paul G.Wilson P2
Hyalosperma zacchaeus (S.Moore) Paul G.Wilson
Hybanthus epacroides (C.A.Gardner) Melch.
Hybanthus floribundus (Lindl.) F.Muell. subsp. *floribundus*
Hydrocotyle diantha DC.
Hydrocotyle pilifera Turcz.
Hypocalymma puniceum C.A.Gardner
**Hypochoeris glabra* L.
Hypoxis glabella R.Br. var. *glabella*

Isoetes australis S.Williams
Isoetopsis graminifolia Turcz.
Isolepis congrua Nees
Isopogon scabriusculus subsp. *stenophyllus* Foreman

Jacksonia arida Chappill ms
Jacksonia nematoclada F.Muell.
**Juncus bufonius* L.
**Juncus capitatus* Weigel

Keraudrenia velutina Steetz subsp. *velutina*
Kippistia suaedifolia F.Muell.

Lachnostachys coolgardiensis forma brevispicata (E.Pritz.) Munir
**Lactuca serriola forma serriola*
**Lamarckia aurea* (L.) Moench
Lawrencella davenportii (F.Muell.) Paul G.Wilson
Lawrencella rosea Lindl.
Lawrencella squamata Miq.
Laxmannia paleacea F.Muell.
Lechenaultia biloba Lindl.
Lechenaultia sp. Kokardine (B.H. Smith 177) PN P3
Lecidea ochroleuca Pers.

Lemooria burkittii (Benth.) P.S.Short
Lepidium genistoides Hewson P2
Lepidium rotundum (Desv.) DC.
Lepidobolus preissianus Nees
Lepidosperma sp. K Boorabbin (K.L. Wilson 2579) PN
Lepidosperma tenue Benth.
Leptochloa fusca (L.) Kunth
Leptomeria preissiana (Miq.) A.DC.
Leptosema aphyllum (Hook.) Crisp
Leptosema daviesioides (Turcz.) Crisp
Leptospermum erubescens Schauer
Leptospermum nitens Turcz.
Leptospermum roei Benth.
Leucopogon hamulosus E.Pritz.
Leucopogon sp. outer wheatbelt (M. Hislop 30) PN
Levenhookia leptantha Benth.
Levenhookia pusilla R.Br.
Lobelia heterophylla Labill.
Lobelia rarifolia E.Wimm.
Logania flaviflora F.Muell.
Lomandra effusa (Lindl.) Ewart
Lomandra sp.
Lycium australe F.Muell.
Lysiana casuarinae (Miq.) Tiegh.
Lysiana sp.
Lysiosepalum rugosum Benth.

Maireana amoena (Diels) Paul G.Wilson
Maireana appressa (Benth.) Paul G.Wilson
Maireana atkinsiana (W.Fitzg.) Paul G.Wilson
Maireana brevifolia (R.Br.) Paul G.Wilson
Maireana carnosa (Moq.) Paul G.Wilson
Maireana diffusa Paul G.Wilson
Maireana erioclada (Benth.) Paul G.Wilson
Maireana georgei (Diels) Paul G.Wilson
Maireana marginata (Benth.) Paul G.Wilson
Maireana oppositifolia (F.Muell.) Paul G.Wilson
Maireana platycarpa Paul G.Wilson
Maireana thesioides (C.A.Gardner) Paul G.Wilson
Maireana trichoptera (J.M.Black) Paul G.Wilson
Maireana triptera (Benth.) Paul G.Wilson
Malleostemon roseus (E.Pritz.) J.W.Green
Malleostemon tuberculatus (E.Pritz.) J.W.Green
Mallophora globiflora Endl.
Mallophora rugosifolia Munir
Marianthus bicolor (Putt.) F.Muell.
Melaleuca acuminata subsp. *websteri* (S.Moore) Craven
Melaleuca acuminata F.Muell.
Melaleuca adnata Turcz.
Melaleuca atroviridis Craven & Lepschi
Melaleuca atroviridis x hamata
Melaleuca brophyi Craven
Melaleuca carrii Craven

Melaleuca cf. grieviana
Melaleuca cf. manglesii
Melaleuca conothamnoides C.A.Gardner
Melaleuca cordata Turcz.
Melaleuca coronicarpa D.A.Herb.
Melaleuca ctenoides Quinn
Melaleuca eleuterostachya F.Muell.
Melaleuca fabri Craven
Melaleuca fulgens R.Br. subsp. *fulgens*
Melaleuca halmaturorum Miq.
Melaleuca hamata Fielding & Gardner
Melaleuca hamulosa Turcz.
Melaleuca lateriflora Benth.
Melaleuca lateriflora Benth. subsp. *lateriflora*
Melaleuca laxiflora Turcz.
Melaleuca leptospermoides Schauer
Melaleuca orbicularis Craven
Melaleuca pauperiflora subsp. *fastigiata* Barlow
Melaleuca platycalyx Diels
Melaleuca radula Lindl.
Melaleuca scalena Craven & Lepschi
Melaleuca sp.
Melaleuca stereophloia Craven
Melaleuca thyoides Turcz.
Melaleuca uncinata forma non-lignotuberous
spicate
Melaleuca uncinata R.Br.
Melaleuca vinnula Craven & Lepschi
Melaleuca zeteticorum Craven & Lepschi
**Mesembryanthemum nodiflorum* L.
Mesomelaena preissii Nees
Microcorys ericifolia Benth.
Microcorys obovata Benth.
Microlepidium pilosulum F.Muell.
Micromyrtus obovata (Turcz.) J.W.Green
Micromyrtus racemosa Benth. var. *racemosa* ms
Millotia perpusilla (Turcz.) P.S.Short
Millotia tenuifolia Cass. var. *tenuifolia*
Mirbelia microphylla (Turcz.) Benth.
Mirbelia ramulosa (Benth.) C.A.Gardner
Mirbelia trichocalyx Domin
Monachather paradoxus Steud.
**Monoculus monstrosus* (Burm.f.) B.Nord.
Monotaxis grandiflora var. ? *obtusifolia*
Monotaxis grandiflora var. *obtusifolia* F.Muell. &
Tate
Muehlenbeckia adpressa (Labill.) Meisn.
Myriocephalus occidentalis (F.Muell.) P.S.Short

Nicotiana rotundifolia Lindl.

Olax benthamiana Miq.
Olearia dampieri subsp. *eremicola* (Diels) Lander
ms
Olearia homolepis var. *pilosa*
Olearia homolepis (F.Muell.) Benth.

Olearia incondita Lander
Olearia muelleri (Sond.) Benth.
Olearia pimeleoides (DC.) Benth.
Opercularia vaginata Juss.
Orthrosanthus laxus var. *gramineus* (Endl.)
Geerinck
Osteocarpum salsuginosum F.Muell.
**Oxalis bowiei* Herb.
**Oxalis pes-caprae* L.

**Papaver hybridum* L.
**Parapholis incurva* (L.) C.E.Hubb.
**Parentucellia latifolia* (L.) Caruel
Parietaria cardiostegia Greuter
**Pentaschistis airoides* (Nees) Stapf
**Pentaschistis airoides* (Nees) Stapf subsp.
airoides
Persicaria prostrata (R.Br.) Sojak
Persoonia chapmaniana P.H.Weston P3
Persoonia coriacea Audas & P.Morris
Persoonia quinquenervis Hook.
Persoonia saundersiana Meisn.
Persoonia stricta P.H.Weston
Petrophile incurvata W.Fitzg.
Petrophile seminuda Lindl.
Petrophile shuttleworthiana Meisn.
Petrophile wonganensis Foreman
Phebalium ? canaliculatum
Phebalium aff. *brachycalyx*
Phebalium ambiguum C.A.Gardner
Phebalium canaliculatum (F.Muell. & Tate)
J.H.Willis
Phebalium drummondii Benth. P1
Phebalium filifolium Turcz.
Phebalium megaphyllum (Ewart) Paul G.Wilson
Phebalium tuberculatum (F.Muell.) Benth.
Pheladenia deformis (R.Br.) D.L.Jones &
M.A.Clem.
Philothea brucei (F.Muell.) Paul G.Wilson
subsp. *brucei*
Philothea deserti (E.Pritz.) Paul G.Wilson
Philothea deserti (E.Pritz.) Paul G.Wilson subsp.
deserti
Philothea glabra Paul G.Wilson
Philothea thryptomenoides (S.Moore) Paul
G.Wilson
Philothea tomentella (Diels) Paul G.Wilson
Phlegmatospermum drummondii (Benth.)
O.E.Schulz P3
Phyllangium divergens (Hook.f.) Dunlop
Phyllota luehmannii F.Muell.
Pimelea aeruginosa F.Muell.
Pimelea angustifolia R.Br.
Pimelea avonensis Rye
Pimelea brevistyla subsp. *minor* Rye
Pimelea imbricata var. *piliger* (Benth.) Diels

Pimelea microcephala R.Br. subsp. *microcephala*
Pittosporum angustifolium Lodd.
Pityrodia dilatata (F.Muell.) Benth.
Pityrodia lepidota (F.Muell.) E.Pritz.
Pityrodia scabra A.S.George R
Pityrodia teckiana (F.Muell.) E.Pritz.
Plantago aff. *hispida*
Plantago debilis R.Br.
Platysace maxwellii (F.Muell.) C.Norman
Platysace trachymenioides F.Muell.
Podolepis canescens DC.
Podolepis capillaris (Steetz) Diels
Podolepis lessonii (Cass.) Benth.
Podolepis tepperi (F.Muell.) D.A.Cooke
Podotheca gnaphalioides Graham
Podotheca uniseta P.S.Short P3
Pogonolepis muelleriana (Sond.) P.S.Short
Pogonolepis sp.
Pogonolepis stricta Steetz
**Polypogon monspeliensis* (L.) Desf.
Poranthera microphylla Brongn.
Prostanthera eckersleyana F.Muell.
Prostanthera nanophylla B.J.Conn P3
Prostanthera semiteres subsp. *intricata* B.J.Conn
Protoparmelia pulchra Diederich et al.
Psammomoya choretroides (F.Muell.) Diels & Loes.
Psammomoya implexa Keighery P3
Pterostylis aff. *rufa*
Pterostylis hamiltonii Nicholls
Pterostylis scabra Lindl.
Ptilotus carlsonii F.Muell.
Ptilotus drummondii (Moq.) F.Muell.
Ptilotus drummondii (Moq.) F.Muell. var. *drummondii*
Ptilotus eriotrichus (Ewart & J.White) P.S.Short
Ptilotus exaltatus var. *villosus* Benl
Ptilotus exaltatus Nees
Ptilotus gaudichaudii var. *parviflorus* (Benth.) Benl
Ptilotus gaudichaudii (Steud.) J.M.Black
Ptilotus gaudichaudii (Steud.) J.M.Black var. *gaudichaudii*
Ptilotus holosericeus (Moq.) F.Muell.
Ptilotus obovatus (Gaudich.) F.Muell.
Ptilotus obovatus (Gaudich.) F.Muell. var. *obovatus*
Ptilotus polystachyus (Gaudich.) F.Muell.
Ptilotus polystachyus (Gaudich.) F.Muell. var. *polystachyus*
Ptilotus spathulatus (R.Br.) Steud. *forma* *spathulatus*
Puccinellia stricta (Hook.f.) C.H.Blom var. *stricta*

Quinetia urvillei Cass.

Ramboldia brunneocarpa Kantvilas & Elix

Regelia velutina (Turcz.) C.A.Gardner
Rhagodia drummondii Moq.
Rhagodia preissii Moq. subsp. *preissii*
Rhodanthe chlorocephala subsp. *rosea* (Hook.) Paul G.Wilson
Rhodanthe citrina (Benth.) Paul G.Wilson
Rhodanthe haigii (F.Muell.) Paul G.Wilson
Rhodanthe heterantha (Turcz.) Paul G.Wilson
Rhodanthe laevis (A.Gray) Paul G.Wilson
Rhodanthe manglesii Lindl.
Rhodanthe pygmaea (DC.) Paul G.Wilson
Rhodanthe rubella (A.Gray) Paul G.Wilson
Rhodanthe spicata (Steetz) Paul G.Wilson
Ricinocarpos velutinus F.Muell.
Rinzia carnosa (S.Moore) Trudgen
Roycea divaricata Paul G.Wilson
Rulingia cuneata Turcz.

Salicornia ? *blackiana* vel. aff.
Santalum spicatum (R.Br.) A.DC.
Sarcozona praecox (F.Muell.) S.T.Blake
Scaevola humifusa de Vriese
Scaevola restiacea Benth.
Scaevola restiacea Benth. subsp. *restiacea*
Scaevola sp.
Scaevola spinescens R.Br.
Schoenia cassiniana (Gaudich.) Steetz
Schoenia filifolia (Turcz.) Paul G.Wilson subsp. *filifolia*
Schoenus nanus (Nees) Benth.
Schoenus sculptus (Nees) Boeck.
Scholtzia drummondii Benth.
Scholtzia parviflora F.Muell.
Sclerolaena diacantha (Nees) Benth.
Sclerolaena eurotioides (F.Muell.) A.J.Scott
Sclerolaena fusiformis Paul G.Wilson
Sclerolaena hybrid
Sclerolaena sp.
Sclerostegia moniliformis Paul G.Wilson
Sclerostegia sp.
Sclerostegia tenuis (Benth.) Paul G.Wilson
Senecio glossanthus (Sond.) Belcher
Senecio lacustrinus I.Thomps.
Senecio pinnatifolius A.Rich.
Senna artemisioides subsp. *filifolia* Randell
Senna cardiosperma (F.Muell.) Randell
Senna pleurocarpa (F.Muell.) Randell
Senna pleurocarpa (F.Muell.) Randell var. *pleurocarpa*
Senna sp.
Senna stowardii (S.Moore) Randell
**Silene gallica* L. var. *gallica*
Siloxerus pygmaeus (A.Gray) P.S.Short
**Sisymbrium irio* L.
**Sisymbrium orientale* L.
Solanum lasiophyllum Poir.

Solanum nummularium S.Moore
Solanum oldfieldii / *plicatile*
Solanum orbiculatum Poir. subsp. *orbiculatum*
 **Sonchus oleraceus* L.
Spartochloa scirpoidea (Steud.) C.E.Hubb.
 **Spergula pentandra* L.
Spergularia sp.
Stackhousia monogyna Labill.
Stellaria filiformis (Benth.) Mattf.
Stenanthemum pomaderroides Reissek
Stenopetalum filifolium Benth.
Stenopetalum gracile Bunge
Stenopetalum salicola Keighery
Stylidium adpressum Benth.
Stylidium caricifolium Lindl.
Stylidium dielsianum E.Pritz.
Stylidium limbatum F.Muell.
Stylidium petiolare Sond.
Stylidium piliferum R.Br.
Stylidium yilgarnense E.Pritz.
Synaphea interioris A.S.George
Synaphea spinulosa subsp. *major* A.S.George

Tecticornia verrucosa Paul G.Wilson
Templetonia aculeata (F.Muell.) Benth.
Templetonia smithiana J.H.Ross
Templetonia sulcata (Meisn.) Benth.
Tetragonia diptera F.Muell.
Teucrium sessiliflorum Benth.
Thelymitra petrophila Jeanes ms
Thelymitra sargentii R.S.Rogers
Thryptomene cuspidata (Turcz.) J.W.Green
Thryptomene kochii E.Pritz.
Thysanothecium hookeri Mont. & Berk.
Thysanotus manglesianus Kunth
Thysanotus pyramidalis Brittan
Trachymene cyanopetala (F.Muell.) Benth.
Trachymene ornata (Endl.) Druce
Trachymene pilosa Sm.
Tragus australianus S.T.Blake
Trichanthodium skirrophorum Sond.
Trichanthodium sp.
 **Trifolium glomeratum* L.
 **Trifolium subterraneum* L.
Triglochin aff. *nana*
Triglochin minutissima F.Muell.
Triglochin mucronata R.Br.
Triglochin nana F.Muell.
Triglochin sp. B Flora of Australia (P.G. Wilson 4294) PN
Triglochin sp. C Flora of Australia (P.G. Wilson 8811) PN
Triglochin sp. A Flora of Australia (G.J.Keighery 2477) subsp.
Triglochin stowardii N.E.Br. P3

Triodia rigidissima (Pilg.) Lazarides
 **Tripteris clandestina* Less.
Tripterococcus brunonis Endl.
Trymalium daphnifolium Reissek

Urodon capitatus Turcz. P3
Urodon sp. Narkal (B.H. Smith 1440) PN P1
Uromycladium tepperianum
 **Ursinia anthemoides* (L.) Poir.

Velleia discophora F.Muell.
Verticordia acerosa var. *preissii* (Schauer) A.S.George
Verticordia auriculata A.S.George
Verticordia brachypoda Turcz.
Verticordia chrysantha Endl.
Verticordia chrysanthella A.S.George
Verticordia endlicheriana var. *compacta* A.S.George
Verticordia eriocephala A.S.George
Verticordia mitchelliana C.A.Gardner
Verticordia monadelpha Turcz. var. *monadelpha*
Verticordia picta Endl.
Verticordia pritzelii Diels
Verticordia rennieana F.Muell. & Tate
Verticordia tumida A.S.George subsp. *tumida*
Verticordia venusta A.S.George P3
 **Vulpia bromoides* (L.) Gray
Vulpia myuros var. *hirsuta*
 **Vulpia myuros* (L.) C.C.Gmel. var. *myuros*
Vulpia sp.

Wahlenbergia gracilentia Lothian
Wahlenbergia preissii de Vriese
Waitzia acuminata Steetz
Waitzia acuminata Steetz var. *acuminata*
Waitzia nitida (Lindl.) Paul G.Wilson
Westringia cephalantha F.Muell.
Westringia rigida R.Br.
Wilsonia humilis R.Br.

Xanthoparmelia subprolixa (Kremp) O.Blanco et al.
Xanthoparmelia verrucella (Essl.)Blanco et al.
Xanthoparmelia willisii (Kurok. & Filson) Elix & J. Johnst.
Xanthorrhoea nana D.A.Herb.

Zygophyllum eremaeum (Diels) Ostenf.
Zygophyllum fruticosum DC.
Zygophyllum ovatum Ewart & Jean White
Zygophyllum simile H.Eichler

 ? *Pogonolepis stricta*
 ? *Siloxerus pygmaeus*

Appendix

5

APPENDIX 5

Fauna species in the Shire of Koorda (Source- WA Museum, 2005)

Information provided by Western Australian Museum, Fauna Base, latitude/longitude coordinates -30.2, 117.20 and -31.00, 117.60.

Note - not a comprehensive list.

* represents an introduced species.

BIRD SPECIES

Accipitridae

Aquila audax

Aegothelidae

Aegotheles cristatus cristatus

Ardeidae

Ardea pacifica

Charadriidae

Peltohyas australis

Maluridae

Malurus splendens

Megapodiidae

Leipoa ocellata

Meliphagidae

Manorina flavigula

Pardalotidae

Pardalotus punctatus xanthopyge

Pardalotus striatus

Psittacidae

Cacatua roseicapilla assimilis

Calyptorhynchus latirostris

Neophema elegans

Platycercus zonarius

Polytelis anthopeplus anthopeplus

Strigidae

Ninox novaeseelandiae

MAMMAL SPECIES

Dasyuridae

Sminthopsis crassicaudata
Sminthopsis dolichura

Felidae

**Felis catus*

Molossidae

Tadarida australis

Muridae

**Mus musculus*
Notomys mitchellii

Suidae

**Sus scrofa*

Tarsipedidae

Tarsipes rostratus

Vespertilionidae

Scotorepens balstoni

REPTILE SPECIES

Agamidae

Ctenophorus cristatus
Ctenophorus maculatus griseus
Ctenophorus ornatus
Moloch horridus
Pogona minor minor

Boidae

Aspidites ramsayi
Morelia spilota imbricata

Elapidae

Brachyuropsis semifasciata
Demansia psammophis reticulata
Parasuta gouldii
Pseudechis australis
Pseudonaja affinis affinis
Pseudonaja modesta
Pseudonaja nuchalis
Simoselaps bertholdi

Gekkonidae

Gehyra variegata
Heteronotia binoei

Pygopodidae

Delma grayii
Lialis burtonii
Pygopus lepidopodus
Pygopus nigriceps

Scincidae

Cryptoblepharus carnabyi
Egernia stokesii badia
Eremiascincus richardsonii
Lerista lineopunctulata

Lerista muelleri
Menetia greyii
Morethia obscura
Tiliqua rugosa rugosa

Typhlopidae

Ramphotyphlops australis
Ramphotyphlops hamatus
Ramphotyphlops waitii

FISH SPECIES

Atherinidae

Atherinosoma wallacei

AMPHIBIA SPECIES

Myobatrachidae

Pseudophryne guentheri

Appendix

6



ROADSIDE CONSERVATION COMMITTEE

GUIDELINES FOR MANAGING THE HARVESTING OF NATIVE FLOWERS, SEED AND TIMBER FROM ROADSIDES

Preamble

The diversity of values associated with roadside vegetation is well documented and acknowledged. In landscapes that have been extensively cleared, roadside vegetation provides essential wildlife corridors and habitat for local flora and fauna, including a number of threatened species. Hence it is highly desirable that this asset is managed in such a way as to ensure its conservation and sustainability.

The control and management of roadside vegetation is the responsibility of the road manager. Local government authorities, as road managers, are often approached for 'permission' to take various flora products from the roadside. These requests are mainly for wildflowers, native seed and firewood. Other products which may be sought includes material for making didgeridoos, other types of craftwood, and stakes or poles for various purposes.

Although road managers are primarily concerned about the maintenance of the running surface itself, through the implementation of these simple guidelines for the removal of flora and timber material from the roadsides, the vegetated roadside reserve should be maintained for its biodiversity values, and the benefit of the community and road users.

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

Legislation

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

Road and rail reserves are Crown land, and hence a licence is required to cut or remove any native flora from a roadside or rail line. There is, however, a legal provision by which the road manager or their agent (contractor) does not require a licence whilst undertaking legitimate road management activities. This provision does not extend to other persons who wish to take protected flora from roadsides.

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

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

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

Commercial Wildflower Harvesting

Western Australia is referred to as the '*Wildflower State*', and its wildflowers attract a significant number of tourists each year. Roadside vegetation provides the most accessible, and hence the most commonly viewed, array of wildflowers, and as such are an important feature of regional tourism and can provide a significant financial boost to local economies.

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

Wildflower harvesting in many instances detracts from the biodiversity and tourism values of the roadside. It is often the case that flora is harvested from roadsides because of the convenience of access, and harvesters should be directed to find alternative locations.

There are situations where some harvesting may be considered, such as in very wide road reserves where the activity can be screened from road users, but mostly road managers have been discouraged from supporting or allowing such harvesting to occur. If harvesting is to be approved, then the points provided at the end of these guidelines should be considered.

Seed Collection

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

Native seed is an important component of remnant vegetation. It is critical for the regeneration of certain species, called re-seeder species, when plants are either killed by an event, such as fire, storm damage, or die as part of their natural cycle. The maintenance of adequate seed of these species is necessary as a precaution to ensure the sustainability of the flora biodiversity.

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

When seed is needed for *bona fide* revegetation projects within the local community, and no other source of local seed is available, then the controlling authority may consider giving permission for collection of seed from roadsides. Such collection must be under the appropriate licence issued by

the Department of Environment and Conservation and the harvesting should be done in a way that does not endanger the long-term survival of the roadside vegetation.

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

Timber Harvesting from Roadsides.

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

The RCC seeks to encourage roadside managers to retain timber on roadsides as an important component of the natural habitat, which fulfils ecological, aesthetic and land management functions. The value of fallen logs and branches within the roadside is often not realised, but this material forms an important habitat for many species of insects, reptiles, mammals and birds, thus enhancing the roadside biodiversity. Insects and reptiles that live in fallen timber are also important elements of the food chain, and are very important to the functioning of natural systems, and the survival of many other native animals.

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

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

Guidelines For Harvesting On Roadsides

- ✓ In all cases the permission of the managing authority, i.e. Main Roads WA, Local Government or the Department of Environment and Conservation, must be sought before native flora is removed from a roadside.
- ✓ Flora removal should be from only designated roads, which have wider vegetated road verges i.e. vegetation width > 3metres
- ✓ The number of operators authorised to remove flora from a roadside should be strictly limited to that which can be sustained and managed. The determination of this is at the judgement of the managing authority, but consideration should be taken of the type of flora being harvested and an evaluation of monitoring of the impact of the harvest activity. Advice may be sought from the Department of Environment and Conservation.
- ✓ Approval for flora harvesting should be for a set period, with a review of the impact and operation before renewal.
- ✓ Approval should also stipulate approved methods of harvesting, the species which may be harvested, and the quantity of material to be taken. Advice on harvest conditions may be obtained from the Department of Environment and Conservation.
- ✓ Any flora removed should not affect the viability of the residual seed bank. It is recommended that no more than 20% of the flowers or seed on a plant should be taken, unless it is in an area that is scheduled to be cleared as part of road management.

- ✓ Methods of harvesting flora should not jeopardise the survival of the plant/tree, unless it is in an area that is scheduled to be cleared as part of road management.
- ✓ The removal of whole plants should be restricted to areas that are scheduled to be cleared as part of road management. Note, some species of flora such as zamia palms and grass trees cannot be removed for commercial purposes without a special endorsement on the Commercial Purposes Licence issued by the Department of Environment and Conservation.
- ✓ No flora of special conservation concern (Declared Rare Flora or Priority Flora) should be removed without special authorisation through the Department of Environment and Conservation.
- ✓ No commercial harvesting of any plant product should be allowed for any reason between the markers that delineate an Environmentally Sensitive Area.
- ✓ Flora harvesting should be prohibited from designated Flora Roads.
- ✓ Care should be taken that access to Dieback infected areas is limited to the drier months of the year, and vehicular access disallowed.
- ✓ Safety should always be of prime concern and every effort should be made to ensure that personal safety is a key consideration in any harvesting operation.
- ✓ Flora harvesters should not operate from the roadside in areas where the vegetation is close to the road, where vehicles cannot be safely parked off the road, or where there is poor driver visibility.

Appendix

7



Guidelines for the Nomination and Management of Flora Roads

Introduction

The Flora Roads program began as an initiative of the Roadside Conservation Committee (RCC), as a means of encouraging road managers to protect and conserve roadside vegetation of high conservation value. Flora Roads also highlight areas of high conservation flora as a tourist asset to local communities and are easily identified to passing travellers as areas worthy of an inspection to view the local flora.



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

Principle Conservation Values of Flora Roads:

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

Identification and Nomination of Flora Roads

The RCC has been coordinating a volunteer roadside survey program since 1989, which provides a list of high conservation value roads within many Shires in the agricultural areas of this state. These roadsides can be investigated further to see if they warrant declaration as a Flora Road. Nevertheless, roadsides that have not been surveyed may still be nominated.

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

A road may be nominated as a Flora Road by submitting a written request to the RCC.

The RCC requires the following information:

- Endorsement from the managing authority;
- Name of the road, LGA, and the road manager (Main Roads WA, Local Government or the **Department of Environment and Conservation**);
- Distance of the proposed Flora Road; and
- Width of the road reserve.

The following information would also be useful:

- Photograph(s) of the road;
- A list of the dominant plant species;
- Threats (weeds, disturbances, etc).

This information will be stored in the RCC Flora Roads Register, a database which is maintained by the RCC.

Establishment of a Flora Road

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

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

Management Implications

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

Part 16 of the RCC *Roadside Manual* details the establishment and management of Flora Roads. The RCC's *Guidelines for Managing Special Environment Areas in Transport Corridors* and the *Roadside Handbook* also provide information on Flora Road establishment.

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

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

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

Tourism Implications

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

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

Flora Road Register

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

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