

# **The Vegetation and Vascular Flora of System 6 Recommendation C53 (Coolup Reserves) and adjacent bushland, Shire of Waroona.**

**A report for Swan Bioplan, Department of Environment and Conservation, Western Australia.**

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## INTRODUCTION

The Coolup Reserves and adjacent bushland comprises a narrow strip of bushland commencing about 2 kilometres north of Waroona, approximately 100 kilometres south of Perth (Figure 1). The majority of the area is identified in the System Six Report under Recommendation C53 (DCE 1983). However there are adjacent patches of bushland within the rail reserve and other adjacent reserves (Figure 2) bringing the total bushland to around 50ha. In 1994 a preliminary vegetation map and flora list for the area was produced (Keighery *et al.* 1994). The report identified the area as supporting a well preserved example of the vegetation and flora of the heavy soils of the eastern side of the Swan Coastal Plain containing a mosaic of communities associated with a diverse flora and a large number of rare, restricted and unusual species. This report principally updates the vegetation map and flora list from the 1994 report and reports on the floristic community types identified in the area (after Gibson *et al.* 1994). Information collected from visits to the reserve (BJK &GJK) since 1994 (including a visit on 25<sup>th</sup> May 2007) and FloraBase (Western Australian Herbarium May 2007) has contributed to this report.

## VEGETATION

### Vegetation Complexes

The entire area is mapped as the Guildford Complex (Heddlé *et al.* 1980). The Guildford Complex, a vegetation complex of the Pinjarra Plain, has 5% of its original area remaining as natural vegetation (EPA 2003). This location on the Pinjarra Plain is consistent with the environmental geology mapping (Gozzard 1987).

### Vegetation Map and Floristic Community Types (Figure 2)

The 1994 report (Keighery *et al.* 1994) mapped a series of units in the area (Tables 1 and 2). Gibson *et al.* (1994) located six plots in the System 6 section of the area (Figure 2 and Table 1). Four floristic community types typical of the Pinjarra Plain (a major landform element of the eastern side of the Swan Coastal Plain, after Government of WA 2000) were identified from the six plots (Figure 2, Tables 1 and 2). In 1994 one of us (BJK) mapped the extent floristic community types in the area for work on the update of System 6 (Figure 2). All four floristic community types are threatened ecological communities (Table 1).

To facilitate an understanding and appreciation of the mapped units and floristic groups the flora for the area is listed in Table 2 against:

- the mapped vegetation units shown in Figure 2; and
- the six plots located in the area.

This listing illustrates the floristic diversity of the vegetation and gives a guide to the species composition of the particular vegetation units, floristic community types and plots.

The vegetation units and associated floristic community types are briefly described below. While boundaries have been drawn in Figure 2 much of the vegetation forms a much finer mosaic of units than those mapped. Within each mapped unit a series of communities could be mapped at a finer scale. This type of mosaic is typical of the plant communities of the Pinjarra Plain, especially those of the Guildford Complex.

### *Jarrah woodland*

Figure 2 Mapping unit = Jarrah woodland; Table 2 column heading = Wc53J

This Jarrah (*Eucalyptus marginata*) woodland unit is located on the driest sandy soils in the north-east sector (north of Talathalla Rd) and is floristic community type 3b (after waro 01 and 02). Patches of vegetation dominated by Jarrah occur within the drier of the areas mapped as Marri woodland.

### *Marri woodland*

Figure 2 Mapping unit = Marri woodland; Table 2 column heading = Wc53M (and to a lesser extent Wc53MP/V, as patches of this unit occur in the Marri woodland)

Marri (*Eucalyptus* or *Corymbia calophylla*) dominated woodlands are mapped over most of the area. These Marri woodlands are often waterlogged and/or shallowly inundated in winter/spring. The understorey of this community is generally dominated by an Open Heath to Open Shrubland of combinations of *Xanthorrhoea preissii* and *Kingia australis* over a Sedgeland dominated by *Tetraria octandra*, *Mesomelaena tetragona* and *Cyathochaeta avenacea*. The wetter areas also support patches of *Viminaria juncea* Tall Open Scrub and *Pericalymma ellipticum* or *Hypocalymma angustifolium* Closed Low Heath. There is an occasional clump of *Melaleuca preissiana* but this species is generally scattered in the Marri woodlands south west of Talathalla Road. These areas are mapped as floristic community type 3a (after waro 06).

Soils range from sandy loams associated with lateritic lenses to winter-wet sand over clays or sandy clays.

### **Wetland Mosaic**

Figure 2 Mapping unit = Wetland mosaic; Table 2 column heading = Wc53Mv and Wc53MP/V

A series of wet flats associated with clayey sands are found in the area. These areas are inundated to various depths in winter/spring, a metre's depth of water forming in the centres of the most pronounced depressions and several centimetres of water on the extensive flats. These areas support a mosaic of communities being combinations of various different shrublands over perennial and/or annually renewed herblands and sedgelands. On the lateritic clays or clays the dominant shrubs include the tall shrubs *Melaleuca viminea*, *Viminaria juncea* and a series of low shrubs including *Verticordia* species, *Pericalymma ellipticum* and *Hakea sulcata*. The regularly inundated depressions are characterised by a dense cover of perennial and/or annually renewed herbs and sedges and represent floristic community type 8 (plots waro 03 and 04). Those areas with a more diverse and dense shrub flora are identified as floristic community type 10a (after waro 05). Additional work on the communities of clayflats/claypans in the south west of WA (Gibson *et al.* 2005) found that plots waro 03 and 04 formed part of a more geographically widespread, but restricted, group of wetlands on clays.

### **Disturbed Areas/Pines**

Figure 2 Mapping unit = Pines and Rail/road verge; Table 2 column heading = Wc53D

Two areas are mapped under this heading: the picnic area and associated Pines and the rail/road verge. However significant areas of native vegetation occur within the rail/road verge and this area contributes to the values of the consolidated bushland remnant. Disturbed vegetation also occurs along the edges of the roads, tracks and drains but these are too narrow to be mapped at the scale used.

### **Threatened Ecological Communities**

As shown in Table 1 (and Figure 2) all of the bushland in the area is mapped as floristic community types that are classed as threatened ecological communities (TEC). The majority of the area being:

- TEC 3a, with small patches of 3b and 10a, corresponding with mapped Marri Woodland;
- TEC 3b, corresponding with mapped Jarrah Woodlands;
- TEC 8 and 10a in the central claypan area mapped as Wetland Mosaic (south of the Pines); and
- TEC 10a in the patches of clayflat mapped as Wetland Mosaic beyond this central area.

The additional work on the claypan or vernal pool communities (Gibson *et al* 2005) may result in TEC 8 being placed in a south-west TEC (rather than a Swan Coastal Plain confined TEC, V English pers comm).

## **VEGETATION CONDITION**

### **Woodlands**

A feature of Marri and Jarrah woodlands is the stunted nature of both trees with only a few scattered trees exceeding 10m in the area. However there are a number of large stumps and logs evident in the bushland as well as some scattered large dead trees. These much larger trees appear to have been killed by fire indicating that at some stage in the past the area was devastated by a very hot fire. Logging of Jarrah has also contributed to the decline in large Jarrah as some of the stumps are clearly the remnants of felled trees. The majority of the Marri present in the area are re-growth from seed, and the Jarrah's regrowth from lignotubers. While the condition of the tree layer has significant fauna habitat ramifications, the overall condition of these communities is Excellent (Keighery 1994), with the shrub, herb, sedge and grass layers being largely

structurally and floristically intact. There are patches of woodland that are in a lesser condition with the understorey being dominated by Love Grass (*Eragrostis curvula*) and three bulbous weeds (*Watsonia*, *Babiana* and *Sparaxis*). In those areas that appear to have been partially or completely cleared and/or soil has been disturbed (through both dumping and removal), Love Grass and/or *Watsonia* have a cover of over 90%.

#### **Wetland Mosaic**

These areas are in variable condition, ranging from near Pristine to Degraded with the majority of the area being in Very Good condition. The areas in a Good to Degraded condition have their annually renewed herb layer dominated by the bulbous weeds *Watsonia*, *Babiana* and *Sparaxis*, Love Grass and some annual grass species (including *Briza* and *Vulpia*).

#### **Disturbed Areas/Pines**

The picnic area in the Pines, edges of the bushland (along the roads, tracks and drains) and the rail/verge support the greatest number and highest density of weeds. A series of woody weeds are found in the Picnic area including *Pinus pinaster*, *Leptospermum laevigatum*, *Agonis flexuosa* and *Chamaecytisus proliferus*. The latter three should be eradicated as they are known invasive species and the Pines contained. The remaining weeds are herbaceous species, the most significant being *Watsonia*, *Babiana*, *Sparaxis*, Love Grass and *Pennisetum macrourum*.

## **FLORA**

A total of 475 vascular plant taxa are listed for the area (Tables 2 and 3). This includes 406 native taxa and 69 weeds (Tables 2 and 3). Such a large and diverse flora, containing many newly described and habitat specific taxa, in a small area is a feature of Pinjarra Plain vegetation (outlined in a series of documents including Keighery and Trudgen 1992, Keighery and Keighery 1991, 1992, 1993 and 1995).

To illustrate the numerous features of the flora in the area, and the special features of the Pinjarra Plain flora, Tables 2 and 3 list the taxa against a variety of attributes.

As outlined previously Table 2 compliments Figure 2, listing the flora against:

- the mapped vegetation units; and
- the six plots located in the area.

This tabulation illustrates the high species richness and diversity of the mapped vegetation units and floristic community types of the Pinjarra Plan.

Table 3 lists the taxa against:

- significant flora category, annotated under a large number of categories related to the various aspects of conservation significance at the federal, state and natural region level;
- distribution of native taxa in Australia;
- growth and life forms; and
- several categories of wetland preferences.

The key to Table 3 describes these various attributes in greater detail. This table well illustrates the high levels of local endemism and the diversity of herbaceous perennials that characterise the Pinjarra Plain flora, as well as the species richness shown in Table 2.

#### **Significant Flora**

Fifty seven of the 406 native taxa are listed as significant for a variety of reasons (Table 3).

Some of the significant flora taxa are discussed below under the categories in the 1994 report. A selection of the listed significant flora taxa are also briefly described to illustrate the large variety of species groups according to family, life/growth form and habitat preferences in the study area.

#### **Declared Rare Flora** (DRF or R in Table 3)

Three species of aquatics found in the area (*Schoenus natans*, *Aponogeton hexatepalus* and *Centrolepis caespitosa*) were listed as DRF in 1994. Changes in the listing of DRF have resulted in these now being listed as Priority species, rather than DRF. However the undetermined *Eleocharis* from the 1994 list (*Eleocharis ?orbicis*) is now known as *Eleocharis keigheryi* and this is listed as DRF (Table 3).

### **Priority Species**

Seventeen taxa are listed as priority flora (Table 3). Some of these are discussed below under a series of headings.

### **Poorly Known Species**

The population of *Phyllangium palustre* (mistakenly listed as *Mitrasacme paradoxa* in the 1994 report) was the first record on the Coastal Plain since the type collection from Midland in 1905.

In 1994 the record of *Aristida racemosa* was considered the only record on the Swan Coastal Plain since a 30 year old record (the only other) from Serpentine. Several other populations have been located on the eastern side of the Plain since this time. FloraBase (Western Australian Herbarium 1998) currently lists this species as a weed but this designation is in dispute.

Three other species were listed under this heading in 1994. These taxa have since been named and are listed below along with their current names.

- *Chamaescilla spiralis* subsp. nov is now known as *Chamaescilla gibsonii* and is a priority listed species endemic to the Pinjarra Plain.
- *Schoenus* sp is *Schoenus plumosus*. Interestingly another annual *Schoenus* from Waroona is yet to be named (*Schoenus* sp. Waroona (G.J. Keighery 12235)).
- *Pogonolepis* sp. was found to be true *Angianthus drummondii* which is now confined to the Pinjarra Plain and is a priority listed species.

### **Geographically Significant Species**

Thirty taxa were listed in 1994 as being normally associated with the Darling Scarp and/or Jarrah forest. Of these thirty species several have been found to have distinct taxa associated with the east of the Plain that are now separated from those on the Darling Scarp and/or Jarrah forest. These include *Grevillea bipinnatifida* subsp. *pagna* and *Ambleysperma minor* (previously under *Trichocline scapigera*). Both taxa are priority listed.

Twenty nine taxa can now be listed as being normally associated with the Darling Scarp and/or Jarrah forest being: *Acanthocarpus canaliculatus*, *Acacia dentifera*, *Lomandra brittanii*, *Acacia latericola*, *Lomandra purpurea*, *Acacia urophylla*, *Lomandra sonderi*, *Darwinia citriodora*, *Tribonanthes brachypetala*, *Verticordia huegelii*, *Caladenia filamentosa*, *Verticordia pennigera*, *Thelymitra antennifera*, *Bossiaea* sp. Waroona (previously *B. aff. eriocarpa*), *Agrostocrinum hirsutum* (previously *A. scabrum*), *Daviesia longifolia*, *Kennedia coccinea*, *Pentapeltis peltigera*, *Ambleysperma spathulatum* (*Trichocline scapigera*), *Grevillea pilulifera*, *Wahlenbergia multicaulis*, *Isopogon asper*, *Astroloma ciliatum*, *Persoonia elliptica*, *Stachystemon vermicularis*, *Thomasia grandiflora*, *Lechenaultia biloba*, *Stylidium amoenum* and *Stylidium thesioides* (*S. canaliculatum*). The names in brackets are the names listed in 1994.

Another large group of species are confined to and/or predominantly distributed on the heavy soils of the eastern side of the Swan Coastal Plain. These include: *Grevillea bipinnatifida* subsp. *pagna*, *Ambleysperma minor*, *Chamaescilla gibsonii*, *Angianthus drummondii*, *Wurmbea dioica* subsp. *alba*, *Schoenus benthamii*, *Schoenus bifidus*, *Austrostipa tenuifolia*, *Lomandra odora*, *Haemodorum sparsiflorum*, *Tribonanthes uniflora*, *Opercularia apiciflora*, *Stylidium carnosum* and *Stylidium ecorne*.

### **Notes on some of the significant flora**

(listed in Monocotyledons and Dicotyledons, then alphabetically for families and genus)

*Aponogeton hexatepalus* Priority 4 (Aponogetonaceae)

This species is a true aquatic of claypans of the Pinjarra Plain south of the Swan River and on the Blackwood Plateau. It can be locally quite common such as at Brixton Street, Carousel Swamp, C53 (the study area) and

claypans in the Tuart Forest. However populations collapse with declining water quality (nutrient enrichment and associated algae growth). With its habitat generally in decline on the Swan Coastal Plain its status should be periodically reviewed. Many small populations have completely collapsed or are known from single plants.

*Centrolepis caespitosa* R (Centrolepidaceae)

Initially listed as presumed extinct, but ranges from Perth to the South Stirlings, found in Austin Bay Nature Reserve and bushland in Reserve 34033, adjacent to Pinjarra Nature Reserve.

*Schoenus natans* Priority 4 (Cyperaceae)

Previous to the Gibson *et al.* 1994 study this species was considered to be extinct (Keighery and Keighery 1996), but it is now recorded from clay based wetlands extending from Bolgart to Lake Muir. Two populations are located in the study area in FCT 7's and 8 in fresh water pools on clay.

*Schoenus* sp. Waroona (GJK 12235) Priority 3 (Cyperaceae)

A recently recognised annual *Schoenus* species (B Rye pers. comm.) found on the seasonally waterlogged and inundated heavy soils of the Pinjarra Plain.

*Eleocharis keigheryi* R (Cyperaceae)

A declared rare species first identified as distinct in the Brixton Street wetlands, located in the area in FCT 8 in fresh water pools on clay.

*Acanthocarpus canaliculatus* (Dasypogonaceae)

On the Swan Coastal Plain this is an uncommon species associated with clay based wetlands on the Pinjarra Plain, reaching its most southern location in the Kemerton area (north east of Bunbury).

*Kingia australis* (Dasypogonaceae)

This distinctive species is characteristic of the Pinjarra Plain and Foothills vegetation. The abundance of *Kingia* in the Coolup Bushland illustrates what much of the Pinjarra Plain would have been like before clearing. In the past *Kingia* was so common on the Pinjarra Plain that tall specimens were used to build 'log' cabins.

*Eryngium ferox* Priority 3 (Apiaceae)

*Eryngium ferox* occurs in clay based perched fresh water. The leaves are produced in late spring. As these pools dry, only soft tubular leaves are produced which typically senesce as the cobalt blue flowers and inflorescence bracts open. When flowering finishes the leaves have died. Flowering occurs between November and January with mature fruits being found by March.

*Eryngium pinnatifidum* subsp. *palustre* Priority 3 (Apiaceae)

This taxon grows in winter wet claypans usually associated with *Melaleuca* shrublands (*Melaleuca lateritia*, *M. viminea* and *M. o'sullivanii*). As the claypans fill with water the tubers produce soft tubular juvenile leaves which are held above the water. These leaves are retained over the entire growing season, not being replaced by adult leaves..

*Acacia lasiocarpa* var. *bracteolata* (long peduncle variant) Priority 1 (Mimosaceae)

Throughout the work on the Swan Coastal Plain the wet claypan/clay flat *Acacia lasiocarpa* has been known as this variant. While this now appears to have been a misallocation of this name, for consistency with previous reports on the Plain, this distinctive form of *Acacia lasiocarpa* associated with Pinjarra Plain clayey wetlands is retained under this name.

*Eremophila glabra* (Myoporaceae)

A series of subspecies have recently been distinguished in *Eremophila glabra*. While this species is listed for C53 (Table 2 and 3) the subspecies was not determined. The green flowered subspecies *E. glabra* subsp. *chlorella* is the subspecies encountered on the eastern side of the Swan Coastal Plain, and is most likely the *E. glabra* in C53. This needs to be confirmed as this is now considered to be a very restricted and threatened

taxon only known from a few populations. The closest recently observed population is in Perth.

## CONCLUSION

As outlined in the Introduction the 1994 report identified the area as supporting a well preserved example of the vegetation and flora of the highly cleared Pinjarra Plain (less than 10% remaining, EPA 2003). The Pinjarra Plain flora and vegetation has particular values related to the presence of:

- a complex mosaic of species rich plant communities;
- a highly diverse flora; and
- the large number of rare, restricted and unusual species.

The 1994 report contributed to a better understanding and documentation of these now well appreciated values.

Work undertaken since the 1994 report has identified the plant communities in the area as threatened ecological communities further emphasising the outstanding conservation values of the area as a remnant of the Guildford Complex of the Pinjarra Plain. These outstanding conservation values include the:

- majority of the vegetation being an excellent example of its type;
- high flora species richness and diversity;
- large number of significant flora (57 in 406 taxa), including one DRF and 17 priority species; and
- presence of four TEC's.

The information on flora and vegetation (particularly Tables 2 and 3) is presented in a format to aid an understanding of these complex natural values and to facilitate management.

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**Table 1**

**Vegetation Units, Plots and Floristic Community Types (after Gibson *et al.*, 1994) in System 6 Recommendation C 53 (Coolup Reserves) and adjacent bushland.**

**Key**

**Key to Columns**

**Column 1: Mapped vegetation units (Figure 2) and associated flora listing groups (Table 2).**

**Column 2: Vegetation Unit Code (Table 2).**

**Column 3: Plot Codes (Table 2) (after Gibson *et al.*, 1994)**

**Column 4: Floristic Community Type Codes (after Gibson *et al.*, 1994)**

**Column 5: Threatened Ecological Communities (after English and Blyth 1997, English pers. com. 2000)**

CR Critically Endangered

EN Endangered

VU Vulnerable

+ Listed as 'endangered' under the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999

Mapped Vegetation units (Figure 2)	Vegetation unit code (Table 2)	Plot Code	FCT	TEC
Marri woodland	Wc53M	waro 06	03a	CR+
Jarraah woodland	Wc53J	waro 01, 02	03b	VU
Wetland mosaic ( <i>Melaleuca viminea</i> claypans)	Wc53Mv	waro 03, 04	08	VU
Wetland mosaic ( <i>Melaleuca</i> low woodland over <i>Pericalymma</i> or <i>Viminaria</i> )	Wc53MP/V	waro 05	10a	EN
Pines	Wc53D	NA	NA	NA
Road/Rail verges, tracks	Wc53D	NA	NA	NA

**TABLE 2.**

**Occurrence of listed taxa from Figure 2 vegetation units and in ‘waro’ plots (after Gibson *et al.* 1994, location shown in Figure 2 this report)**

**Key**

**Column 1**            **Family (Families are grouped into Ferns, Gymnosperms, Monocotyledons and Dicotyledons)**

**Column 2**            **Scientific Name**  
Genus + Species + Infra Species Rank + Infra Species Name + Informal Name from Keighery *et al.* (2006) as of database on January 2006. Therefore, species names may be modified from original sources of information: DEP (1996), Gibson *et al.* (1994) and Keighery (1996). Some taxa yet to be formally described and named may have a reference collection number from the relevant collector. Taxa (species, sub-species and varieties) are listed alphabetically within genera.

- \*            weed
- subsp.    subspecies
- var.        variety
- MS        a manuscript name yet to be published
- PN        a phrase name for a taxa yet to be described and published.

**Column 3-14**        **Occurrence in plots & vegetation units. (after Table 1)**

<b>Columns 3-14 Codes</b>	<b>Mapped Vegetation Unit (Figure 2)</b>
<b>Plots</b>	
waro 01	Jarraah woodland
waro 02	Jarraah woodland
adjwaro 02	
waro 03	Wetland Mosaic ( <i>Melaleuca viminea</i> claypans)
waro 04	Wetland Mosaic
adjwaro 04	( <i>Melaleuca viminea</i> claypans)
waro 05	Wetland Mosaic ( <i>Melaleuca</i> low woodland over <i>Pericalymma</i> or <i>Viminaria</i> )
waro 06	Marri woodland
adjwaro 06	Marri woodland
<b>Vegetation Units</b>	
wc53D	Disturbed areas: pines, drains, road and rail verges, track edges
wc53J	Jarraah woodland
wc53M	Marri woodland
wc53MP/V	Wetland Mosaic (with patches in the Marri woodland) ( <i>Melaleuca</i> low woodland over <i>Pericalymma</i> or <i>Viminaria</i> )
wc53Mv	Wetland Mosaic ( <i>Melaleuca viminea</i> claypans)

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
<b>Fern</b>															
Adiantaceae	Cheilanthes austrotenuifolia												X		
Dennstaedtiaceae	Pteridium esculentum												X		
Isoetaceae	Isoetes australis														X
Isoetaceae	Isoetes drummondii subsp. drummondii				X	X									
Marsileaceae	Pilularia novae-hollandiae					X									X
Selaginellaceae	Selaginella gracillima				X	X									X
<b>Gymnosperm</b>															
Zamiaceae	Macrozamia riedlei		X										X		
<b>Monocot</b>															
Amaryllidaceae	* Amaryllis belladonna												X		
Anthericaceae	Agrostocrinum scabrum		X						X			X	X		
Anthericaceae	Arthropodium capillipes	X	X										X		
Anthericaceae	Arthropodium preissii				X	X									X
Anthericaceae	Caesia micrantha	X	X			X						X			X
Anthericaceae	Caesia occidentalis		X						X					X	X
Anthericaceae	Chamaescilla corymbosa var. corymbosa	X	X										X		
Anthericaceae	Chamaescilla gibsonii					X									X
Anthericaceae	Corynotheca micrantha var. micrantha											X			
Anthericaceae	Sowerbaea laxiflora	X	X									X	X	X	X
Anthericaceae	Thysanotus dichotomus											X			X
Anthericaceae	Thysanotus multiflorus											X			
Anthericaceae	Thysanotus patersonii												X		X
Anthericaceae	Thysanotus sparteus								X			X	X		
Anthericaceae	Thysanotus thyrsoideus	X	X					X				X	X		
Anthericaceae	Thysanotus triandrus											X			
Anthericaceae	Tricoryne elatior								X			X	X		
Anthericaceae	Tricoryne tenella											X			
Aponogetonaceae	Aponogeton hexatepalus				X	X									X
Asparagaceae	* Asparagus asparagoides											X			
Boryaceae	Borya scirpoidea	X							X			X	X	X	X

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Boryaceae	<i>Borya sphaerocephala</i>														X
Centrolepidaceae	<i>Aphelia cyperoides</i>	X						X				X			
Centrolepidaceae	<i>Aphelia drummondii</i>														X
Centrolepidaceae	<i>Aphelia nutans</i>														X
Centrolepidaceae	<i>Centrolepis alepyroides</i>														X
Centrolepidaceae	<i>Centrolepis aristata</i>				X	X		X				X	X		X
Centrolepidaceae	<i>Centrolepis caespitosa</i>														X
Centrolepidaceae	<i>Centrolepis drummondiana</i>	X	X									X			
Centrolepidaceae	<i>Centrolepis glabra</i>				X										X
Centrolepidaceae	<i>Centrolepis mutica</i>														X
Centrolepidaceae	<i>Centrolepis polygyna</i>							X							
Colchicaceae	<i>Burchardia congesta</i>		X									X	X		
Colchicaceae	<i>Burchardia multiflora</i>				X	X		X	X						X
Colchicaceae	<i>Wurmbea dioica</i> subsp. <i>alba</i>														X
Colchicaceae	<i>Wurmbea dioica</i> subsp. <i>Brixton</i> (GJ Keighery 12803)				X	X									
Cyperaceae	<i>Baumea acuta</i>														X
Cyperaceae	<i>Baumea juncea</i>													X	
Cyperaceae	<i>Chorizandra enodis</i>				X	X									X
Cyperaceae	<i>Cyathochaeta avenacea</i>	X	X					X	X			X	X		
Cyperaceae	<i>Cyperus alterniflorus</i>														X
Cyperaceae	* <i>Cyperus tenellus</i>				X		X	X						X	X
Cyperaceae	<i>Eleocharis keigheryi</i>														X
Cyperaceae	<i>Isolepis cernua</i>	X			X										X
Cyperaceae	<i>Isolepis hookeriana</i>														X
Cyperaceae	* <i>Isolepis hystrix</i>														X
Cyperaceae	* <i>Isolepis marginata</i>												X		
Cyperaceae	<i>Isolepis oldfieldiana</i>							X					X		X
Cyperaceae	<i>Isolepis setiformis</i>				X			X							
Cyperaceae	<i>Lepidosperma longitudinale</i>													X	X
Cyperaceae	<i>Lepidosperma squamatum</i>	X	X					X				X			
Cyperaceae	<i>Mesomelaena graciliceps</i>	X	X									X	X		
Cyperaceae	<i>Mesomelaena stygia</i> subsp. <i>stygia</i>												X		
Cyperaceae	<i>Mesomelaena tetragona</i>	X	X					X	X				X		
Cyperaceae	<i>Schoenus benthamii</i>													X	

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Cyperaceae	Schoenus bifidus								X						X
Cyperaceae	Schoenus capillifolius				X										X
Cyperaceae	Schoenus curvifolius								X			X	X		
Cyperaceae	Schoenus humilis							X							X
Cyperaceae	Schoenus maschalinus														X
Cyperaceae	Schoenus natans				X										X
Cyperaceae	Schoenus odontocarpus	X				X									X
Cyperaceae	Schoenus plumosus														X
Cyperaceae	Schoenus rigens							X						X	
Cyperaceae	Schoenus sp. Waroona (G.J. Keighery 12235) PN														X
Cyperaceae	Schoenus tenellus				X										X
Cyperaceae	Schoenus unispiculatus											X	X		
Cyperaceae	Tetraria capillaris														X
Cyperaceae	Tetraria octandra	X	X						X			X	X		
Cyperaceae	Tricostularia neesii var. neesii													X	
Dasyopogonaceae	Acanthocarpus canaliculatus												X		
Dasyopogonaceae	Calectasia narragara											X			
Dasyopogonaceae	Dasyopogon bromeliifolius		X										X		
Dasyopogonaceae	Kingia australis	X						X	X			X	X	X	
Dasyopogonaceae	Lomandra brittanii	X	X										X		
Dasyopogonaceae	Lomandra caespitosa		X						X			X	X		
Dasyopogonaceae	Lomandra hermaphrodita	X	X									X			
Dasyopogonaceae	Lomandra micrantha subsp. micrantha												X	X	
Dasyopogonaceae	Lomandra odora												X		
Dasyopogonaceae	Lomandra preissii												X		
Dasyopogonaceae	Lomandra purpurea												X		
Dasyopogonaceae	Lomandra sericea		X										X		
Dasyopogonaceae	Lomandra sonderi												X		
Dasyopogonaceae	Lomandra suaveolens											X			
Haemodoraceae	Anigozanthos manglesii subsp. manglesii		X									X			
Haemodoraceae	Anigozanthos manglesii x viridis												X		
Haemodoraceae	Anigozanthos viridis subsp. viridis												X		
Haemodoraceae	Conostylis aculeata subsp. aculeata	X						X				X	X	X	
Haemodoraceae	Conostylis juncea	X	X									X	X		

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Haemodoraceae	<i>Conostylis setigera</i> subsp. <i>setigera</i>												X	X	
Haemodoraceae	<i>Haemodorum laxum</i>	X	X					X	X			X	X		
Haemodoraceae	<i>Haemodorum paniculatum</i>											X			
Haemodoraceae	<i>Haemodorum simplex</i>					X									X
Haemodoraceae	<i>Haemodorum sparsiflorum</i>	X						X					X		X
Haemodoraceae	<i>Haemodorum spicatum</i>											X	X		
Haemodoraceae	<i>Phlebocarya ciliata</i>		X									X	X		
Haemodoraceae	<i>Tribonanthes australis</i>														X
Haemodoraceae	<i>Tribonanthes brachypetala</i>													X	
Haemodoraceae	<i>Tribonanthes uniflora</i>				X	X									X
Hydatellaceae	<i>Trithuria bibracteata</i>							X							X
Hydatellaceae	<i>Trithuria submersa</i>				X	X									X
Hypoxidaceae	<i>Hypoxis glabella</i> var. <i>glabella</i>												X		X
Hypoxidaceae	<i>Hypoxis occidentalis</i> var. <i>occidentalis</i>				X	X		X							X
Iridaceae	* <i>Babiana angustifolia</i>										X		X		X
Iridaceae	* <i>Chasmanthe floribunda</i>										X				
Iridaceae	<i>Patersonia juncea</i>	X							X				X		
Iridaceae	<i>Patersonia occidentalis</i>	X						X	X			X		X	
Iridaceae	* <i>Romulea rosea</i> var. <i>australis</i>					X					X	X	X	X	X
Iridaceae	* <i>Sparaxis bulbifera</i>										X		X		X
Iridaceae	* <i>Watsonia marginata</i>										X				X
Iridaceae	* <i>Watsonia meriana</i> var. <i>bulbillifera</i>												X		
Juncaceae	* <i>Juncus articulatus</i>														X
Juncaceae	<i>Juncus bufonius</i>														X
Juncaceae	* <i>Juncus capitatus</i>	X	X									X	X		
Juncaceae	<i>Juncus holoschoenus</i>							X					X		X
Juncaceae	<i>Juncus pauciflorus</i>													X	
Juncaginaceae	<i>Triglochin centrocarpa</i>												X		
Juncaginaceae	<i>Triglochin linearis</i>				X	X							X		X
Juncaginaceae	<i>Triglochin muelleri</i> subsp. <i>muelleri</i>														X
Juncaginaceae	<i>Triglochin muelleri</i> subsp. <i>recurvum</i>							X					X		X
Orchidaceae	<i>Caladenia denticulata</i> subsp. <i>Jarrah Forest</i> (G.J. Keighery 13592)			X									X		
Orchidaceae	<i>Caladenia ferruginea</i>	X	X											X	
Orchidaceae	<i>Caladenia flava</i> subsp. <i>flava</i>		X									X			

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Orchidaceae	<i>Caladenia longicauda</i> subsp. <i>longicauda</i>			X								X	X		
Orchidaceae	<i>Cyrtostylis robusta</i>												X		
Orchidaceae	* <i>Disa bracteata</i>										X		X		
Orchidaceae	<i>Diuris corymbosa</i>		X										X		
Orchidaceae	<i>Diuris laxiflora</i>					X									X
Orchidaceae	<i>Eriochilus helonomos</i>														X
Orchidaceae	<i>Leporella fimbriata</i>											X	X		
Orchidaceae	<i>Lyperanthus serratus</i>												X		
Orchidaceae	<i>Microtis atrata</i>														X
Orchidaceae	<i>Microtis media</i>							X				X			
Orchidaceae	<i>Microtis orbicularis</i>														X
Orchidaceae	<i>Prasopphyllum cyphochilum</i>														X
Orchidaceae	<i>Prasopphyllum drummondii</i>	X													X
Orchidaceae	<i>Prasopphyllum hians</i>											X			
Orchidaceae	<i>Prasopphyllum macrostachyum</i>											X	X		
Orchidaceae	<i>Prasopphyllum parvifolium</i>											X			
Orchidaceae	<i>Pterostylis</i> sp. Slender Snail Orchid (G.J. Keighery 14516) PN											X			
Orchidaceae	<i>Pterostylis vittata</i>											X			
Orchidaceae	<i>Pyrorchis nigricans</i>											X	X		
Orchidaceae	<i>Thelymitra antennifera</i>							X							X
Orchidaceae	<i>Thelymitra crinita</i>											X			
Orchidaceae	<i>Thelymitra flexuosa</i>														X
Orchidaceae	<i>Thelymitra vulgaris</i>												X		
Philydraceae	<i>Philydrella drummondii</i>				X	X		X							X
Philydraceae	<i>Philydrella pygmaea</i> subsp. <i>pygmaea</i>	X						X						X	X
Phormiaceae	<i>Dianella revoluta</i> var. <i>divaricata</i>											X			
Poaceae	* <i>Aira caryophyllea</i>	X										X	X	X	X
Poaceae	* <i>Aira cupaniana</i>		X												
Poaceae	<i>Amphibromus nervosus</i>				X	X									X
Poaceae	<i>Amphipogon amphipogonoides</i>														X
Poaceae	<i>Amphipogon debilis</i>														X
Poaceae	<i>Amphipogon turbinatus</i>								X			X			
Poaceae	* <i>Anthoxanthum odoratum</i>														X
Poaceae	<i>Aristida ramosa</i>												X	X	



Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Poaceae	<i>Austrodanthonia caespitosa</i>				X										
Poaceae	<i>Austrodanthonia occidentalis</i>											X	X	X	
Poaceae	<i>Austrodanthonia setacea</i>	X							X						
Poaceae	<i>Austrostipa campylachne</i>								X						
Poaceae	<i>Austrostipa compressa</i>											X	X		
Poaceae	<i>Austrostipa semibarbata</i>											X	X		
Poaceae	<i>Austrostipa tenuifolia</i>														X
Poaceae	* <i>Avena fatua</i>														X
Poaceae	* <i>Briza maxima</i>	X	X					X	X			X			
Poaceae	* <i>Briza minor</i>	X	X					X				X	X		X
Poaceae	* <i>Bromus diandrus</i>														X
Poaceae	* <i>Bromus madritensis</i>														X
Poaceae	* <i>Cynodon dactylon</i>										X				X
Poaceae	* <i>Ehrharta calycina</i>											X			
Poaceae	* <i>Ehrharta longiflora</i>											X			
Poaceae	* <i>Eragrostis curvula</i>										X	X	X	X	X
Poaceae	<i>Lachnagrostis filiformis</i>														X
Poaceae	<i>Lachnagrostis plebeia</i>				X										X
Poaceae	<i>Lachnagrostis preissii</i>														X
Poaceae	* <i>Lolium multiflorum</i>														X
Poaceae	<i>Microlaena stipoides</i> var. <i>stipoides</i>											X	X		
Poaceae	* <i>Melinis repens</i>										X				
Poaceae	<i>Neurachne alopecuroidea</i>	X										X	X		X
Poaceae	* <i>Pennisetum macrourum</i>										X				
Poaceae	* <i>Poa annua</i>												X		X
Poaceae	<i>Poa drummondiana</i>											X			
Poaceae	<i>Polypogon tenellus</i>				X	X								X	X
Poaceae	<i>Tetrarrhena laevis</i>												X		
Poaceae	* <i>Vulpia fasciculata</i>														X
Poaceae	* <i>Vulpia myuros</i> var. <i>myuros</i>												X		X
Poaceae	* <i>Vulpia myuros</i> var. <i>myuros</i>		X												
Restionaceae	<i>Desmocladus fasciculatus</i>	X	X					X	X			X			
Restionaceae	<i>Hypolaena exsulca</i>		X						X			X	X		
Restionaceae	<i>Lepyrodia macra</i>							X	X					X	

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Restionaceae	Lepyrodia muirii														X
Restionaceae	Loxocarya cinerea											X			
Restionaceae	Lyginia barbata											X	X		
Restionaceae	Meeboldina cana				X	X			X						X
Restionaceae	Meeboldina coangustata				X			X							X
Restionaceae	Meeboldina roycei MS													X	
Typhaceae	Typha domingensis														X
Xanthorrhoeaceae	Xanthorrhoea brunonis											X	X		
Xanthorrhoeaceae	Xanthorrhoea preissii	X	X					X	X			X		X	
<b>Dicot</b>															
Amaranthaceae	Alternanthera nodiflora														X
Amaranthaceae	Ptilotus esquamatus												X		
Amaranthaceae	Ptilotus drummondii var. drummondii												X		
Amaranthaceae	Ptilotus manglesii											X			
Amaranthaceae	Ptilotus polystachyus var. polystachyus											X			
Apiaceae	Eryngium ferox MS														X
Apiaceae	Eryngium pinnatifidum subsp. palustre MS														X
Apiaceae	Eryngium pinnatifidum subsp. pinnatifidum MS	X										X	X		
Apiaceae	Homalosciadium homalocarpum		X										X		
Apiaceae	Hydrocotyle callicarpa							X					X		X
Apiaceae	Hydrocotyle diantha													X	
Apiaceae	Hydrocotyle pilifera		X												
Apiaceae	Pentapeltis peltigera											X	X		
Apiaceae	Schoenolaena juncea				X			X	X					X	X
Apiaceae	Trachymene pilosa		X									X			
Apiaceae	Xanthosia huegelii subsp. huegelii MS	X	X						X			X	X		
Asteraceae	Amblyosperma minor														X
Asteraceae	Amblyosperma spathulatum		X									X			
Asteraceae	Angianthus drummondii				X	X									X
Asteraceae	Angianthus preissianus				X										X
Asteraceae	Brachyscome bellidioides				X	X		X							X
Asteraceae	* Cotula coronopifolia														X
Asteraceae	Cotula cotuloides														X

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Asteraceae	* <i>Dittrichia graveolens</i>										X				
Asteraceae	<i>Euchiton sphaericus</i>											X			
Asteraceae	<i>Hyalosperma cotula</i>					X							X	X	X
Asteraceae	* <i>Hypochaeris glabra</i>	X	X								X	X	X	X	
Asteraceae	<i>Lagenophora huegelii</i>		X									X			
Asteraceae	<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>											X			
Asteraceae	<i>Myriocephalus helichrysoides</i>														X
Asteraceae	<i>Myriocephalus isoetes</i>														X
Asteraceae	<i>Olearia paucidentata</i>											X	X	X	
Asteraceae	<i>Podolepis gracilis</i>				X							X	X		
Asteraceae	<i>Podolepis gracilis</i> (Swamp form) (GJ Keighery 13126)														X
Asteraceae	<i>Quinetia urvillei</i>	X	X									X			
Asteraceae	<i>Rhodanthe pyrethrum</i>				X										X
Asteraceae	<i>Senecio multicaulis</i> subsp. <i>multicaulis</i>											X		X	
Asteraceae	<i>Siloxerus humifusus</i>											X	X		
Asteraceae	* <i>Sonchus oleraceus</i>												X		
Asteraceae	* <i>Ursinia anthemoides</i>		X									X			
Asteraceae	<i>Waitzia suaveolens</i> var. <i>suaveolens</i>											X			
Brassicaceae	* <i>Brassica tournefortii</i>										X				
Callitrichaceae	* <i>Callitriche hamulata</i>				X										X
Callitrichaceae	* <i>Callitriche stagnalis</i>				X										X
Campanulaceae	* <i>Wahlenbergia capensis</i>											X			
Campanulaceae	<i>Wahlenbergia preissii</i>											X	X		
Campanulaceae	<i>Wahlenbergia stricta</i>												X		
Caryophyllaceae	* <i>Cerastium glomeratum</i>										X				
Caryophyllaceae	* <i>Petrorhagia dubia</i>										X				
Caryophyllaceae	* <i>Silene nocturna</i>										X				
Caryophyllaceae	* <i>Stellaria media</i>										X				
Casuarinaceae	<i>Allocasuarina humilis</i>											X	X		
Crassulaceae	<i>Crassula closiana</i>														X
Crassulaceae	<i>Crassula colorata</i> var. <i>colorata</i>		X									X	X	X	
Crassulaceae	<i>Crassula exserta</i>											X			
Crassulaceae	* <i>Crassula natans</i> var. <i>minus</i>				X										X
Crassulaceae	<i>Crassula peduncularis</i>		X												

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Cuscutaceae	* <i>Cuscuta epithymum</i>														X
Dilleniaceae	<i>Hibbertia acerosa</i>	X							X			X	X		
Dilleniaceae	<i>Hibbertia hypericoides</i>	X	X									X	X		
Dilleniaceae	<i>Hibbertia stellaris</i>								X					X	
Dilleniaceae	<i>Hibbertia subvaginata</i>											X			
Dilleniaceae	<i>Hibbertia vaginata</i>	X											X		
Droseraceae	<i>Drosera bulbigena</i>												X		X
Droseraceae	<i>Drosera bulbosa</i> subsp. <i>bulbosa</i>	X				X			X						
Droseraceae	<i>Drosera erythrorhiza</i> subsp. <i>erythrorhiza</i>		X									X	X		
Droseraceae	<i>Drosera gigantea</i> subsp. <i>gigantea</i>	X						X	X				X	X	X
Droseraceae	<i>Drosera glanduligera</i>	X	X									X			
Droseraceae	<i>Drosera macrantha</i> subsp. <i>macrantha</i>		X									X			
Droseraceae	<i>Drosera marchantii</i> subsp. <i>marchantii</i>	X											X		X
Droseraceae	<i>Drosera menziesii</i> subsp. <i>menziesii</i>							X	X						
Droseraceae	<i>Drosera menziesii</i> subsp. <i>penicillaris</i>	X										X	X		
Droseraceae	<i>Drosera nitidula</i> subsp. <i>nitidula</i>														X
Droseraceae	<i>Drosera pulchella</i>														X
Droseraceae	<i>Drosera rosulata</i>														X
Droseraceae	<i>Drosera stolonifera</i> subsp. <i>porrecta</i>		X									X	X		
Droseraceae	<i>Drosera stolonifera</i> subsp. <i>stolonifera</i>	X													
Droseraceae	<i>Drosera tubaestylis</i>							X				X	X		X
Droseraceae	<i>Drosera zonaria</i>											X			
Elatinaceae	<i>Elatine gratioloides</i>				X										X
Epacridaceae	<i>Astroloma ciliatum</i> (glaucous form)											X			X
Epacridaceae	<i>Astroloma pallidum</i>	X										X	X	X	
Epacridaceae	<i>Leucopogon propinquus</i>		X									X	X		
Epacridaceae	<i>Lysinema ciliatum</i>											X			
Euphorbiaceae	* <i>Euphorbia peplus</i>										X				
Euphorbiaceae	<i>Phyllanthus calycinus</i>		X									X			
Euphorbiaceae	<i>Poranthera microphylla</i>											X	X		
Euphorbiaceae	<i>Stachystemon vermicularis</i>													X	
Gentianaceae	* <i>Centaurium erythraea</i>											X	X		X
Gentianaceae	* <i>Cicendia filiformis</i>	X			X	X		X							X
Geraniaceae	* <i>Erodium cicutarium</i>											X	X		

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Geraniaceae	Geranium solanderi												X		
Geraniaceae	* Pelargonium capitatum										X				
Geraniaceae	Pelargonium littorale subsp. littorale											X			
Goodeniaceae	Anthotium junciforme														X
Goodeniaceae	Dampiera alata											X	X		
Goodeniaceae	Dampiera linearis	X	X						X			X	X	X	
Goodeniaceae	Goodenia coerulea								X			X			
Goodeniaceae	Goodenia micrantha				X			X							X
Goodeniaceae	Goodenia pulchella subsp. Coastal Plain B (L.W. Sage 2336) PN											X	X		
Goodeniaceae	Lechenaultia biloba		X									X			
Goodeniaceae	Scaevola lanceolata											X			
Goodeniaceae	Scaevola phlebopetala	X	X									X			
Goodeniaceae	Velleia trinervis														X
Haloragaceae	Gonocarpus pithyoides											X			
Haloragaceae	Myriophyllum echinatum					X									X
Lamiaceae	Hemiandra pungens								X					X	
Lauraceae	Cassytha flava													X	
Lauraceae	Cassytha glabella													X	
Lauraceae	Cassytha micrantha					X									
Lauraceae	Cassytha pomiformis														X
Lauraceae	Cassytha racemosa											X			
Lentibulariaceae	Utricularia multifida					X								X	X
Lobeliaceae	Isotoma hypocrateriformis											X	X		
Lobeliaceae	Isotoma pusilla				X										X
Lobeliaceae	Isotoma scapigera														X
Lobeliaceae	Lobelia tenuior											X	X		
Loganiaceae	Phyllangium palustre														X
Loganiaceae	Phyllangium paradoxum											X			
Loranthaceae	Nuytsia floribunda											X	X		
Menyanthaceae	Villarsia submersa				X										X
Mimosaceae	Acacia applanata	X										X			
Mimosaceae	Acacia barbinervis subsp. barbinervis												X		
Mimosaceae	Acacia dentifera												X		
Mimosaceae	Acacia extensa													X	

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Mimosaceae	<i>Acacia huegelii</i>											X	X		
Mimosaceae	<i>Acacia incurva</i>												X		
Mimosaceae	<i>Acacia lasiocarpa</i>												X		
Mimosaceae	<i>Acacia lateriticola</i>												X		
Mimosaceae	<i>Acacia nervosa</i>	X										X	X		
Mimosaceae	<i>Acacia pulchella</i>		X												
Mimosaceae	<i>Acacia pulchella</i> var. <i>glaberrima</i>											X	X		
Mimosaceae	<i>Acacia saligna</i>											X	X		
Mimosaceae	<i>Acacia stenoptera</i>	X										X			
Mimosaceae	<i>Acacia urophylla</i>												X		
Mimosaceae	<i>Acacia willdenowiana</i>		X												
Myoporaceae	<i>Eremophila glabra</i>													X	
Myrtaceae	<i>Astartea</i> aff. <i>fascicularis</i> (Gibson et al. 1994)				X	X									
Myrtaceae	<i>Astartea affinis</i>													X	X
Myrtaceae	<i>Baeckea camphorosmae</i>	X	X									X			
Myrtaceae	<i>Calytrix angulata</i>											X			
Myrtaceae	<i>Darwinia citriodora</i>												X		
Myrtaceae	<i>Eucalyptus calophylla</i>	X							X			X	X		
Myrtaceae	<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	X	X									X	X		
Myrtaceae	<i>Eucalyptus rudis</i>													X	
Myrtaceae	<i>Hypocalymma angustifolium</i>													X	
Myrtaceae	<i>Hypocalymma robustum</i>											X			
Myrtaceae	<i>Kunzea micrantha</i> subsp. <i>micrantha</i>							X				X	X	X	
Myrtaceae	<i>Kunzea recurva</i>											X			
Myrtaceae	* <i>Leptospermum laevigatum</i>										X				
Myrtaceae	<i>Melaleuca incana</i>													X	
Myrtaceae	<i>Melaleuca lateritia</i>														X
Myrtaceae	<i>Melaleuca pauciflora</i>				X										X
Myrtaceae	<i>Melaleuca preissiana</i>													X	
Myrtaceae	<i>Melaleuca raphiopylla</i>														
Myrtaceae	<i>Melaleuca thymoides</i>													X	X
Myrtaceae	<i>Melaleuca viminea</i> subsp. <i>viminea</i>				X										X
Myrtaceae	<i>Pericalymma ellipticum</i> var. <i>floridum</i>							X	X			X		X	X
Myrtaceae	<i>Verticordia densiflora</i>							X							

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Myrtaceae	<i>Verticordia densiflora</i> var. <i>densiflora</i>													X	X
Myrtaceae	<i>Verticordia huegelii</i> var. <i>stylosa</i>														X
Myrtaceae	<i>Verticordia pennigera</i>														X
Myrtaceae	<i>Verticordia serrata</i>														X
Onagraceae	<i>Epilobium billardioreanum</i>				X										
Onagraceae	* <i>Oenothera glazioviana</i>										X				
Orobanchaceae	* <i>Orobanche minor</i>											X	X		
Oxalidaceae	<i>Oxalis perennans</i>													X	
Oxalidaceae	* <i>Oxalis pes-caprae</i>										X		X		
Oxalidaceae	* <i>Oxalis polyphylla</i>										X		X		
Oxalidaceae	* <i>Oxalis purpurea</i>										X		X		
Papilionaceae	<i>Bossiaea eriocarpa</i>	X	X									X	X		
Papilionaceae	<i>Bossiaea</i> sp. Waroona (B.J. Keighery & N. Gibson 229) PN		X									X	X		
Papilionaceae	<i>Daviesia angulata</i>								X			X	X		
Papilionaceae	<i>Daviesia costata</i>												X		
Papilionaceae	<i>Daviesia inflata</i>												X		
Papilionaceae	<i>Daviesia longifolia</i>												X		
Papilionaceae	<i>Daviesia physodes</i>		X										X		
Papilionaceae	<i>Daviesia preissii</i>											X	X		
Papilionaceae	<i>Eutaxia virgata</i>					X									X
Papilionaceae	<i>Gastrolobium capitatum</i>		X						X			X			
Papilionaceae	<i>Gompholobium aristatum</i>		X									X			
Papilionaceae	<i>Gompholobium confertum</i>											X			
Papilionaceae	<i>Gompholobium marginatum</i>	X										X			
Papilionaceae	<i>Gompholobium polymorphum</i>		X									X			
Papilionaceae	<i>Hardenbergia comptoniana</i>											X			
Papilionaceae	<i>Hovea trisperma</i> var. <i>grandiflora</i>	X													
Papilionaceae	<i>Hovea trisperma</i> var. <i>trisperma</i>		X									X			
Papilionaceae	<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>											X			
Papilionaceae	<i>Jacksonia angulata</i>		X										X		
Papilionaceae	<i>Jacksonia sternbergiana</i>											X			
Papilionaceae	<i>Kennedia coccinea</i>											X			
Papilionaceae	<i>Kennedia prostrata</i>	X										X			
Papilionaceae	* <i>Lotus angustissimus</i>					X						X	X		X

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Papilionaceae	* <i>Medicago polymorpha</i>										X				
Papilionaceae	* <i>Ornithopus compressus</i>	X				X		X					X		X
Papilionaceae	<i>Sphaerolobium medium</i>											X			
Papilionaceae	<i>Templetonia biloba</i>											X			
Papilionaceae	* <i>Trifolium arvense</i> var. <i>arvense</i>												X		
Papilionaceae	* <i>Trifolium campestre</i> var. <i>campestre</i>											X	X		X
Papilionaceae	<i>Viminaria juncea</i>	X			X					X				X	X
Pittosporaceae	<i>Pronaya fraseri</i>		X									X	X		
Polygalaceae	<i>Comesperma calymega</i>													X	
Polygalaceae	<i>Comesperma polygaloides</i>														X
Polygalaceae	<i>Comesperma virgatum</i>	X										X			
Portulacaceae	<i>Calandrinia brevipedata</i>											X			
Portulacaceae	<i>Calandrinia corrigioloides</i>											X			
Portulacaceae	<i>Calandrinia granulifera</i>											X			
Primulaceae	* <i>Anagallis arvensis</i>												X	X	X
Proteaceae	<i>Adenanthos meisneri</i>											X	X		
Proteaceae	<i>Banksia grandis</i>	X										X	X		
Proteaceae	<i>Conospermum capitatum</i> subsp. <i>glabratum</i>		X									X			
Proteaceae	<i>Conospermum stoechadis</i> subsp. <i>stoechadis</i>		X									X			
Proteaceae	<i>Dryandra lindleyana</i>	X	X					X	X			X			
Proteaceae	<i>Grevillea bipinnatifida</i> subsp. <i>pagna</i>												X	X	
Proteaceae	<i>Grevillea pilulifera</i>	X										X			
Proteaceae	<i>Hakea candolleana</i>							X	X					X	
Proteaceae	<i>Hakea ceratophylla</i>								X					X	X
Proteaceae	<i>Hakea lissocarpa</i>											X			
Proteaceae	<i>Hakea prostrata</i>											X			
Proteaceae	<i>Hakea sulcata</i>							X						X	
Proteaceae	<i>Hakea varia</i>							X						X	
Proteaceae	<i>Isopogon asper</i>												X		
Proteaceae	<i>Persoonia saccata</i>											X			
Proteaceae	<i>Petrophile juncifolia</i>								X				X		
Proteaceae	<i>Petrophile linearis</i>		X									X			
Proteaceae	<i>Stirlingia latifolia</i>											X	X	X	
Proteaceae	<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>							X	X			X	X		



Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Proteaceae	<i>Xylomelum occidentale</i>											X			
Ranunculaceae	<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>		X												
Rubiaceae	* <i>Galium murale</i>											X			
Rhamnaceae	<i>Trymalium floribundum</i> (along drain)													X	
Rubiaceae	<i>Opercularia apiciflora</i>	X										X	X		
Rubiaceae	<i>Opercularia vaginata</i>											X			
Rutaceae	<i>Boronia crenulata</i>											X			
Rutaceae	<i>Boronia spathulata</i>								X				X	X	
Rutaceae	<i>Philotheca spicata</i>	X	X						X			X	X		
Santalaceae	<i>Leptomeria cunninghamii</i>												X		
Scrophulariaceae	* <i>Bartsia trixago</i>										X				X
Scrophulariaceae	<i>Glossostigma drummondii</i>				X	X									X
Scrophulariaceae	<i>Gratiola pubescens</i>				X	X									X
Scrophulariaceae	* <i>Parentucellia latifolia</i>	X									X			X	
Solanaceae	* <i>Solanum nigrum</i>										X		X		
Stackhousiaceae	<i>Stackhousia pubescens</i>											X			
Stackhousiaceae	<i>Tripterococcus brunonis</i>												X		
Sterculiaceae	<i>Thomasia grandiflora</i>	X										X			
Stylidiaceae	<i>Levenhookia pusilla</i>	X	X												X
Stylidiaceae	<i>Levenhookia stipitata</i>		X									X			
Stylidiaceae	<i>Stylidium amoenum</i>												X		
Stylidiaceae	<i>Stylidium brunonianum</i> subsp. <i>brunonianum</i>								X			X	X		
Stylidiaceae	<i>Stylidium calcaratum</i>		X									X	X		
Stylidiaceae	<i>Stylidium carnosum</i>												X		
Stylidiaceae	<i>Stylidium crassifolium</i>														X
Stylidiaceae	<i>Stylidium dichotomum</i>														X
Stylidiaceae	<i>Stylidium divaricatum</i>				X										X
Stylidiaceae	<i>Stylidium ecorne</i>														X
Stylidiaceae	<i>Stylidium inundatum</i> (FB)														X
Stylidiaceae	<i>Stylidium junceum</i> subsp. <i>junceum</i>												X		
Stylidiaceae	<i>Stylidium mimeticum</i>														X
Stylidiaceae	<i>Stylidium piliferum</i> subsp. <i>piliferum</i>		X									X	X		
Stylidiaceae	<i>Stylidium pulchellum</i> (FB)														
Stylidiaceae	<i>Stylidium repens</i>											X			

Family	Name	waro 01	waro 02	adjwaro 02	waro 03	waro 04	adjwaro 04	waro 05	waro 06	adjwaro 06	wc53D	wc53J	wc53M	wc53MP/V	wc53Mv
Stylidiaceae	Stylidium roseonatum														X
Stylidiaceae	Stylidium thesoides (previously known as S. canaliculatum)														X
Stylidiaceae	Stylidium utricularioides														X
Thymelaeaceae	Pimelea imbricata var. major				X										X
Violaceae	Hybanthus calycinus											X			
Violaceae	Hybanthus floribundus												X		

**TABLE 3**  
**Vascular Flora of System 6 Recommendation C53 (Coolup Reserves) and adjacent bushland, Shire of Waroona.**

**Key**

**Column 1**            **Family (Families are grouped into Ferns, Gymnosperms, Monocotyledons and Dicotyledons)**

**Column 2**            **Scientific Name**  
 Genus + Species + Infra Species Rank + Infra Species Name + Informal Name from Keighery *et al.* (2006) as of database on January 2006. Therefore, species names may be modified from original sources of information: DEP (1996), Gibson *et al.* (1994) and Keighery (1996). Some taxa yet to be formally described and named may have a reference collection number from the relevant collector. Taxa (species, sub-species and varieties) are listed alphabetically within genera.

- \*            weed
- subsp.    subspecies
- var.        variety
- MS        a manuscript name yet to be published
- PN        a phrase name for a taxa yet to be described and published.

**Column 3, 4 & 5**    **Significant Taxa**

**Column 3**            **WA = State listed species**  
 State listed significant plant taxa (species, sub-species and varieties) listed under the *Wildlife Conservation Act 1950* by the Department of Conservation and Land Management (Atkins 2006)

- R            Declared Rare Flora
- 1            Priority 1: Poorly Known Taxa
- 2            Priority 2: Poorly Known Taxa
- 3            Priority 3: Poorly Known Taxa
- 4            Priority 4: Rare Taxa

**Column 4**            **Com = Commonwealth listed species**  
 Commonwealth listed significant plant taxa (species, sub-species and varieties) listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* as documented on the Department of Environment and Heritage website as of Feb. 2005.

- EN        Species that are endangered
- VU        Species that are vulnerable
- TD        Species that are extinct

<b>Column 5</b>	<b>OS = Other significant taxa</b>
	<b>Significant due to geographical location</b>
r	populations at the northern/southern limit of their known geographic range
d	populations disjunct from their known geographic range
p	considered to be poorly reserved (applies to all Declared Rare Flora and Priority taxa)
s	significant populations (applies to all Declared Rare Flora and Priority taxa)
u	uncommon in the area
	<b>Significant due to ecological preferences</b>
e	taxa endemic to the Swan Coastal Plain
h	taxa with distinct habitat preference
	<b>Significant due to morphological variation</b>
v	variant, not at taxonomic level
t	variant, significant taxonomically

<b>Column 6</b>	<b>Endemic</b>
	Taxa (species, sub-species and varieties) endemic to Western Australia (WA) or Australia (AUST) (>AUST = cosmopolitan) No records are given for weeds, see Hussey <i>et al.</i> 1997 for country of origin, unless the plant is also native to WA.

<b>Column 7</b>	<b>Growth Form</b> (See Key to terms at the end of this key for definitions)
	<b>Woody Plants</b>
T	Tree
M	Mallee
SH-T	Shrub/tree or <b>Tree-Shrub (T-SH)</b>
SH	Shrub
SH-H	Shrub which is often called a herb
	<b>Non-woody Plants: non-grass-like</b>
H	Herb
H-SH	Herb which is often called a shrub
	<b>Non-woody Plants: grass-like</b>
G	Grass
S-C	Sedge – Cyperaceae and others
S-R	Sedge – Restionaceae
S-J	Sedge – Juncaceae and others

<b>Column 8</b>	<b>All Growth Forms</b> (See Key to terms at the end of this key for definitions)
CL	Climber
PR	Prostrate

<b>Column 9</b>	<b>Life Form</b>
A	Annual
A2	Biennial
P	Perennial
PAA	Perennial annually renewed from above ground part
PAB	Perennial annually renewed from below ground part
A-PAR	Annual - Parasite or Semi-parasite
P-PAR	Perennial - Parasite or Semi-parasite

**Column 10**                      **Life Form – aquatics**

- AQD    Aquatic – damp flowering. Grows in water, flowers in damp mud
- AQE    Aquatic – emergent. Grows and flowers in water with some parts emergent above water (e.g. leaves, flowers)
- AQF    Aquatic – floating. Whole plant floats on water
- AQS    Aquatic – supported. Grows and flowers in water with most parts supported by water (e.g. leaves), flowers may be emergent above water

**Column 11**                      **Common Swan Coastal Plain Wetland Species**

Most commonly encountered wetland species on the Southern Swan Coastal Plain based on an analysis of >1000 plots. Commonly encountered species were determined to be those that occurred in 10 or more plots of wetland floristic community types 75% or more of the time.

**KEY COLUMN 7: GROWTH FORM DEFINITIONS**

Definitions adapted from Keighery (1994), McDonald *et al.* (1990) and Executive Steering Committee for Australian Vegetation Information (2003)

**WOODY PLANTS**

Plants with special thick-walled cells in their trunks and stems that form wood to support the plant. Trees are able to build up layer upon layer of this woody support tissue to form trunks and branches. All woody plants are perennial.

- Tree                              Plants with a single trunk and a canopy. The canopy is less than or equal to two thirds of the height of the trunk. No lignotuber is evident.
  
- Tree- Shrub                    Trees that appear shrub like (ie multi stemmed trees that are not mallees).
- Shrub-Tree                    Shrubs that appear tree like (ie single stemmed shrubs).
- Mallee                         Plants with many trunks (usually 2-5) arising from a lignotuber. The canopy is usually well above the base of the plant. Most are from the genus *Eucalyptus*.
  
- Shrub                            Plants with one or more woody stems and foliage all or part of the total height of the plant. Includes palms, grass trees (*Xanthorrhoea* and *Kingia* species) and cycads (*Zamia* species).
  
- Shrub-Herb                    Shrub that appears herb-like. Plants with a woody stem/s that is lax enough to give the shrub a non-woody herb-like appearance, often called sub-shrubs.

#### NON-WOODY PLANTS

**Plants with no (or insufficient) special thick-walled support cells in their stems to form wood for support. May be either annuals or perennials. Sub-divided according to growth form, pollination method and plant family.**

#### NON-WOODY PLANTS - NON GRASS-LIKE **Generally not pollinated by wind, monocots and dicots**

- Herb                      Plants with non-woody stems that are not grasses or sedges. Generally under half a metre tall. Most monocots are herbs except for the larger ones which are classed as shrubs such as palms, grass trees (*Xanthorrhoea* and *Kingia* species) and cycads (*Zamia* species).
- Herb-Shrub              Herb that appears shrub-like. Plants with non-woody stems that are stiff enough to give the herb a woody shrub-like appearance, often called sub-shrubs.

#### NON-WOODY PLANTS – GRASS-LIKE

**Generally pollinated by wind and from the families Poaceae, Cyperaceae, Centrolepidaceae, Hydatellaceae, Juncaginaceae, Restionaceae, Juncaceae, Typhaceae or Xyridaceae**

**Grasses - leaf sheath always split, ligule present, leaf usually flat, stem cross-section circular, evenly spaced internodes.**

- Grass                      Tufted or spreading plants from the family Poaceae. Some species form hummocks but none of these occur in south-west Western Australia.

**Sedges - leaf sheath never split (except in some Restionaceae), usually no ligule, leaf not always flat, extended internode below inflorescence.**

- Sedge –  
Cyperaceae and  
others                      Tufted or spreading plants from the families Cyperaceae, Centrolepidaceae, Hydatellaceae or Juncaginaceae.
- Sedge –  
Restionaceae              Tufted or spreading plants from the family Restionaceae. Commonly called rushes.
- Sedge – Juncaceae  
and others                  Tufted or spreading plants from the families Juncaceae, Typhaceae or Xyridaceae. Some of these are also called rushes.

#### ALL GROWTH FORMS

- Climber                      Plants in need of other plants or objects for support.
- Prostrate                      Spreading plants, often supported by the ground.

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
<b>Fern</b>										
Adiantaceae	Cheilanthes austrotenuifolia			d,h	>AUST	H		PAB		
Dennstaedtiaceae	Pteridium esculentum				AUST	H		P		
Isoetaceae	Isoetes australis			h	AUST	H		PAB	AQD	
Isoetaceae	Isoetes drummondii subsp. drummondii			h	AUST	H		PAB	AQD	
Marsileaceae	Pilularia novae-hollandiae			h	AUST	H		PAB	AQD	
Selaginellaceae	Selaginella gracillima			h	>AUST	H		A		
<b>Gymnosperm</b>										
Zamiaceae	Macrozamia riedlei				WA	SH-H		P		
Pin	* Pinus pinaster									
<b>Monocot</b>										
Amaryllidaceae	* Amaryllis belladonna					H		PAB		
Anthericaceae	Agrostocrinum scabrum				WA	H		P		
Anthericaceae	Arthropodium capillipes				WA	H		PAB		
Anthericaceae	Arthropodium preissii			h	WA	H		PAB		y
Anthericaceae	Caesia micrantha				WA	H		PAB		
Anthericaceae	Caesia occidentalis				WA	H		PAB		
Anthericaceae	Chamaescilla corymbosa var. corymbosa				AUST	H		PAB		
Anthericaceae	Chamaescilla gibsonii	3		p,s,e,h	WA	H		PAB	AQD	
Anthericaceae	Corynotheca micrantha var. micrantha				WA	H-SH		PAB		
Anthericaceae	Sowerbaea laxiflora				WA	H		PAB		
Anthericaceae	Thysanotus dichotomus				WA	H		PAB		
Anthericaceae	Thysanotus multiflorus				WA	H		P		
Anthericaceae	Thysanotus patersonii				WA	H	CL	PAB		
Anthericaceae	Thysanotus sparteus				WA	H		P		
Anthericaceae	Thysanotus thyrsoides				WA	H		PAB		
Anthericaceae	Thysanotus triandrus				WA	H		P		
Anthericaceae	Tricoryne elatior				AUST	H		P		
Anthericaceae	Tricoryne tenella				WA	H		P		
Aponogetonaceae	Aponogeton hexatepalus	4		p,s,e,h	WA	H		PAB	AQF	y
Asparagaceae	* Asparagus asparagoides					H	CL	PAB		
Boryaceae	Borya scirpoidea			h	WA	H		P		y
Boryaceae	Borya sphaerocephala			h	WA	H		P		y
Centrolepidaceae	Aphelia cyperoides				WA	S-C		A		y
Centrolepidaceae	Aphelia drummondii			h	WA	S-C		A	AQD	
Centrolepidaceae	Aphelia nutans			h	WA	S-C		A	AQD	y
Centrolepidaceae	Centrolepis alepyroides			h	WA	S-C		A	AQD	y
Centrolepidaceae	Centrolepis aristata				AUST	S-C		A		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Centrolepidaceae	<i>Centrolepis caespitosa</i>	4	EN	p,s,h	WA	S-C		A	AQD	
Centrolepidaceae	<i>Centrolepis drummondiana</i>				AUST	S-C		A		
Centrolepidaceae	<i>Centrolepis glabra</i>				AUST	S-C		A		y
Centrolepidaceae	<i>Centrolepis mutica</i>				WA	S-C		A		y
Centrolepidaceae	<i>Centrolepis polygyna</i>				AUST	S-C		A		
Colchicaceae	<i>Burchardia congesta</i>				WA	H		PAB		
Colchicaceae	<i>Burchardia multiflora</i>				WA	H		PAB		y
Colchicaceae	<i>Wurmbea dioica</i> subsp. <i>alba</i>				AUST	H		PAB		
Colchicaceae	<i>Wurmbea dioica</i> subsp. <i>Brixton</i> (GJ Keighery 12803)			h,t	WA	H		PAB	AQD	
Cyperaceae	<i>Baumea acuta</i>				AUST	S-C		P	AQE	
Cyperaceae	<i>Baumea juncea</i>				>AUST	S-C		P		y
Cyperaceae	<i>Chorizandra enodis</i>			h	AUST	S-C		P	AQD	y
Cyperaceae	<i>Cyathochaeta avenacea</i>				WA	S-C		P		
Cyperaceae	<i>Cyperus alterniflorus</i>				AUST	S-C		P		
Cyperaceae	* <i>Cyperus tenellus</i>					S-C		P		
Cyperaceae	<i>Eleocharis keigheryi</i>	R	VU	p,s,h	WA	S-C		PAB	AQE	
Cyperaceae	<i>Isolepis cernua</i>				>AUST	S-C		A		
Cyperaceae	<i>Isolepis hookeriana</i>				AUST	S-C		A		
Cyperaceae	* <i>Isolepis hystrix</i>					S-C		A		
Cyperaceae	* <i>Isolepis marginata</i>					S-C		A		
Cyperaceae	<i>Isolepis oldfieldiana</i>				WA	S-C		A		y
Cyperaceae	<i>Isolepis setiformis</i>				WA	S-C		A		
Cyperaceae	<i>Lepidosperma longitudinale</i>				AUST	S-C		P		y
Cyperaceae	<i>Lepidosperma squamatum</i>				WA	S-C		P		
Cyperaceae	<i>Mesomelaena graciliceps</i>				WA	S-C		P		
Cyperaceae	<i>Mesomelaena stygia</i> subsp. <i>stygia</i>				WA	S-C		P		
Cyperaceae	<i>Mesomelaena tetragona</i>			d	WA	S-C		P		
Cyperaceae	<i>Schoenus benthamii</i>	3		p,s	WA	S-C		P		
Cyperaceae	<i>Schoenus bifidus</i>				WA	S-C		P		y
Cyperaceae	<i>Schoenus capillifolius</i>	2		p,s,h	WA	S-C		A	AQS	
Cyperaceae	<i>Schoenus curvifolius</i>				WA	S-C		P		
Cyperaceae	<i>Schoenus humilis</i>				WA	S-C		A		y
Cyperaceae	<i>Schoenus maschalinus</i>				WA	S-C		P		
Cyperaceae	<i>Schoenus natans</i>	4		p,s,h	WA	S-C		A	AQS	
Cyperaceae	<i>Schoenus odontocarpus</i>				WA	S-C		A		y
Cyperaceae	<i>Schoenus plumosus</i>				WA	S-C		A		y
Cyperaceae	<i>Schoenus rigens</i>				WA	S-C		P		y
Cyperaceae	<i>Schoenus</i> sp. <i>Waroona</i> (G.J. Keighery 12235) PN	3		r,p,s,e,h	WA	S-C		A	AQD	
Cyperaceae	<i>Schoenus tenellus</i>				WA	S-C		A	AQE	y
Cyperaceae	<i>Schoenus unispiculatus</i>				WA	S-C		P		y
Cyperaceae	<i>Tetraria capillaris</i>				WA	S-C		P		



Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Cyperaceae	<i>Tetraria octandra</i>				WA	S-C		P		
Cyperaceae	<i>Tricostularia neesii</i> var. <i>neesii</i>				WA	S-C		P		
Dasyopogonaceae	<i>Acanthocarpus canaliculatus</i>			h	WA	H-SH		P		
Dasyopogonaceae	<i>Calectasia narragara</i>				WA	H-SH		P		
Dasyopogonaceae	<i>Dasyopogon bromeliifolius</i>				WA	SH-H		P		
Dasyopogonaceae	<i>Kingia australis</i>			h	WA	H		P		
Dasyopogonaceae	<i>Lomandra brittanii</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra caespitosa</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra hermaphrodita</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra micrantha</i> subsp. <i>micrantha</i>				AUST	H		P		
Dasyopogonaceae	<i>Lomandra odora</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra preissii</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra purpurea</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra sericea</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra sonderi</i>				WA	H		P		
Dasyopogonaceae	<i>Lomandra suaveolens</i>				WA	H		P		
Haemodoraceae	<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>				WA	H		PAB		
Haemodoraceae	<i>Anigozanthos manglesii</i> x <i>viridis</i>				WA	H		PAB		
Haemodoraceae	<i>Anigozanthos viridis</i> subsp. <i>viridis</i>				WA	H		PAB		y
Haemodoraceae	<i>Conostylis aculeata</i> subsp. <i>aculeata</i>				WA	H		P		
Haemodoraceae	<i>Conostylis juncea</i>				WA	H		P		
Haemodoraceae	<i>Conostylis setigera</i> subsp. <i>setigera</i>				WA	H		P		
Haemodoraceae	<i>Haemodorum laxum</i>				WA	H		PAB		
Haemodoraceae	<i>Haemodorum paniculatum</i>				WA	H		PAB		
Haemodoraceae	<i>Haemodorum simplex</i>			h	WA	H		PAB		y
Haemodoraceae	<i>Haemodorum sparsiflorum</i>				WA	H		PAB		y
Haemodoraceae	<i>Haemodorum spicatum</i>				WA	H		PAB		
Haemodoraceae	<i>Phlebocarya ciliata</i>				WA	H		P		
Haemodoraceae	<i>Tribonanthes australis</i>				WA	H		PAB		y
Haemodoraceae	<i>Tribonanthes brachypetala</i>				WA	H		PAB		
Haemodoraceae	<i>Tribonanthes uniflora</i>			s	WA	H		PAB	AQD	
Hydatellaceae	<i>Trithuria bibracteata</i>			h	WA	S-C		A	AQE/AQD	y
Hydatellaceae	<i>Trithuria submersa</i>			h	WA	S-C		A	AQE/AQD	
Hypoxidaceae	<i>Hypoxis glabella</i> var. <i>glabella</i>				>AUST	H		PAB		
Hypoxidaceae	<i>Hypoxis occidentalis</i> var. <i>occidentalis</i>				WA	H		PAB		y
Iridaceae	* <i>Babiana angustifolia</i>					H		PAB		
Iridaceae	* <i>Chasmanthe floribunda</i>					H		PAB		
Iridaceae	<i>Patersonia juncea</i>				WA	H		P		
Iridaceae	<i>Patersonia occidentalis</i>				AUST	H		P		
Iridaceae	* <i>Romulea rosea</i> var. <i>australis</i>					H		PAB		
Iridaceae	* <i>Sparaxis bulbifera</i>					H		PAB		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Iridaceae	* <i>Watsonia marginata</i>					H		PAB		
Iridaceae	* <i>Watsonia meriana</i> var. <i>bulbillifera</i>					H		PAB		
Juncaceae	* <i>Juncus articulatus</i>					S-J		P		
Juncaceae	<i>Juncus bufonius</i>				>AUST	S-J		A		
Juncaceae	* <i>Juncus capitatus</i>					S-J		A		
Juncaceae	<i>Juncus holoschoenus</i>				>AUST	S-J		P	AQD	
Juncaceae	<i>Juncus pauciflorus</i>				>AUST	S-J		P		
Juncaginaceae	<i>Triglochin centrocarpa</i>				WA	S-C		A		
Juncaginaceae	<i>Triglochin linearis</i>				WA	S-C		PAB	AQE	y
Juncaginaceae	<i>Triglochin muelleri</i> subsp. <i>muelleri</i>				WA	S-C		PAB	AQE	
Juncaginaceae	<i>Triglochin muelleri</i> subsp. <i>recurvum</i>				WA	S-C		PAB	AQE	
Orchidaceae	<i>Caladenia denticulata</i> subsp. <i>Jarrah Forest</i> (G.J. Keighery 13592)				WA	H		PAB		
Orchidaceae	<i>Caladenia ferruginea</i>				WA	H		PAB		
Orchidaceae	<i>Caladenia flava</i> subsp. <i>flava</i>				WA	H		PAB		
Orchidaceae	<i>Caladenia longicauda</i> subsp. <i>longicauda</i>				WA	H		PAB		
Orchidaceae	<i>Caladenia longicauda</i> subsp. <i>clivicola</i>	4			WA	H		PAB		
Orchidaceae	<i>Cyrtostylis robusta</i>				AUST	H		PAB		
Orchidaceae	* <i>Disa bracteata</i>				=	H		PAB		
Orchidaceae	<i>Diuris corymbosa</i>				WA	H		PAB		
Orchidaceae	<i>Diuris laxiflora</i>				WA	H		PAB		
Orchidaceae	<i>Eriochilus helonomos</i>				WA	H		PAB		
Orchidaceae	<i>Leporella fimbriata</i>				WA	H		PAB		
Orchidaceae	<i>Lyperanthus serratus</i>				WA	H		PAB		
Orchidaceae	<i>Microtis atrata</i>				AUST	H		PAB		
Orchidaceae	<i>Microtis media</i>				WA	H		PAB		
Orchidaceae	<i>Microtis orbicularis</i>				AUST	H		PAB		
Orchidaceae	<i>Prasophyllum cyphochilum</i>				WA	H		PAB		
Orchidaceae	<i>Prasophyllum drummondii</i>				WA	H		PAB		y
Orchidaceae	<i>Prasophyllum hians</i>				WA	H		PAB		
Orchidaceae	<i>Prasophyllum macrostachyum</i>				WA	H		PAB		
Orchidaceae	<i>Prasophyllum parvifolium</i>				WA	H		PAB		
Orchidaceae	<i>Pterostylis</i> sp. <i>Slender Snail Orchid</i> (G.J. Keighery 14516) PN				WA	H		PAB		
Orchidaceae	<i>Pterostylis vittata</i>				WA	H		PAB		
Orchidaceae	<i>Pyrorchis nigricans</i>				AUST	H		PAB		
Orchidaceae	<i>Thelymitra antennifera</i>				WA	H		PAB		y
Orchidaceae	<i>Thelymitra crinita</i>				WA	H		PAB		
Orchidaceae	<i>Thelymitra flexuosa</i>				WA	H		PAB		y
Orchidaceae	<i>Thelymitra vulgaris</i>				WA	H		PAB		
Philydraceae	<i>Philydrella drummondii</i>				WA	H		PAB		y

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Philydraceae	<i>Philydrella pygmaea</i> subsp. <i>pygmaea</i>				WA	H		PAB		y
Phormiaceae	<i>Dianella revoluta</i> var. <i>divaricata</i>				WA	H		P		
Poaceae	* <i>Aira caryophyllea</i>					G		A		
Poaceae	* <i>Aira cupaniana</i>					G		A		
Poaceae	<i>Amphibromus nervosus</i>			h	WA	G		P		y
Poaceae	<i>Amphipogon amphipogonoides</i>				WA	G		P		
Poaceae	<i>Amphipogon debilis</i>				WA	G		P		
Poaceae	<i>Amphipogon turbinatus</i>				WA	G		P		
Poaceae	* <i>Anthoxanthum odoratum</i>					G		A		
Poaceae	<i>Aristida ramosa</i>			h	AUST	G		P		
Poaceae	<i>Austrodanthonia caespitosa</i>				AUST	G		P		
Poaceae	<i>Austrodanthonia occidentalis</i>				WA	G		P		
Poaceae	<i>Austrodanthonia setacea</i>				AUST	G		P		
Poaceae	<i>Austrostipa campylachne</i>				WA	G		P		
Poaceae	<i>Austrostipa compressa</i>				WA	G		P		
Poaceae	<i>Austrostipa semibarbata</i>				AUST	G		P		
Poaceae	<i>Austrostipa tenuifolia</i>				AUST	G		P		
Poaceae	* <i>Avena fatua</i>					G		A		
Poaceae	* <i>Briza maxima</i>					G		A		
Poaceae	* <i>Briza minor</i>					G		A		
Poaceae	* <i>Bromus diandrus</i>					G		A		
Poaceae	* <i>Bromus madritensis</i>					G		A		
Poaceae	* <i>Cynodon dactylon</i>					G		P		
Poaceae	* <i>Ehrharta calycina</i>					G		P		
Poaceae	* <i>Ehrharta longiflora</i>					G		A		
Poaceae	* <i>Eragrostis curvula</i>									
Poaceae	<i>Lachnagrostis filiformis</i>				>AUST	G		A		y
Poaceae	<i>Lachnagrostis plebeia</i>				WA	G		A		y
Poaceae	<i>Lachnagrostis preissii</i>				WA	G		A		
Poaceae	* <i>Lolium multiflorum</i>					G		A		
Poaceae	* <i>Melinis repens</i>					G		P		
Poaceae	<i>Microlaena stipoides</i> var. <i>stipoides</i>				>AUST	G		P		
Poaceae	<i>Neurachne alopecuroidea</i>				AUST	G		P		
Poaceae	* <i>Pennisetum macrourum</i>									
Poaceae	* <i>Poa annua</i>					G		A		
Poaceae	<i>Poa drummondiana</i>				AUST	G		P		
Poaceae	<i>Polypogon tenellus</i>				WA	G		A		y
Poaceae	<i>Tetrarrhena laevis</i>				WA	G		P		
Poaceae	* <i>Vulpia fasciculata</i>					G		A		
Poaceae	* <i>Vulpia myuros</i> var. <i>myuros</i>					G		A		
Poaceae	* <i>Vulpia myuros</i> var. <i>myuros</i>					G		A		

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		WA	Com	OS		G1	G2	Life Form	AQ	C
Restionaceae	Desmocladus fasciculatus				WA	S-R		P		
Restionaceae	Hypolaena exsulca				WA	S-R		P		
Restionaceae	Lepyrodia macra				WA	S-R		P		y
Restionaceae	Lepyrodia muirii				WA	S-R		P		y
Restionaceae	Loxocarya cinerea				WA	S-R		P		
Restionaceae	Lyginia barbata				WA	S-R		P		
Restionaceae	Meeboldina cana				WA	S-R		P		y
Restionaceae	Meeboldina coangustata				WA	S-R		P		y
Restionaceae	Meeboldina roycei MS				WA	S-R		P		y
Typhaceae	Typha domingensis				>AUST	S-J		PAB	AQE	
Xanthorrhoeaceae	Xanthorrhoea brunonis				WA	SH		P		
Xanthorrhoeaceae	Xanthorrhoea preissii				WA	SH		P		
<b>Dicot</b>										
Amaranthaceae	Alternanthera nodiflora				WA	H	PR	A		
Amaranthaceae	Ptilotus drummondii var. drummondii				WA	H		P		
Amaranthaceae	Ptilotus esquamatus				WA	H		P		
Amaranthaceae	Ptilotus manglesii				WA	H		PAB		
Amaranthaceae	Ptilotus polystachyus var. polystachyus				AUST	H-SH		A/P		
Apiaceae	Eryngium ferox MS	3		r, p,s,	WA	H		PAB		
Apiaceae	Eryngium pinnatifidum subsp. palustre MS	3		p,s,h	WA	H		PAB		y
Apiaceae	Eryngium pinnatifidum subsp. pinnatifidum MS				WA	H		PAB		
Apiaceae	Homalosciadium homalocarpum				WA	H		A		
Apiaceae	Hydrocotyle callicarpa				AUST	H		A		
Apiaceae	Hydrocotyle diantha				WA	H		A		
Apiaceae	Hydrocotyle pilifera				AUST	H		A		
Apiaceae	Pentapeltis peltigera				WA	H	PR	P		
Apiaceae	Schoenolaena juncea				WA	H		PAB		y
Apiaceae	Trachymene pilosa				AUST	H		A		
Apiaceae	Xanthosia huegelii subsp. huegelii MS				WA	H-SH		P		
Asteraceae	Amblyperma minor			p,s,h	WA	H		PAB	AQD	
Asteraceae	Amblyperma spathulatum			s	WA	H		PAB		
Asteraceae	Angianthus drummondii	3		s	WA	H		A		
Asteraceae	Angianthus preissianus				AUST	H		A		y
Asteraceae	Brachyscome bellidioides				WA	H		A		y
Asteraceae	* Cotula coronopifolia				>AUST	H		A/P	AQE/AQD	y
Asteraceae	Cotula cotuloides				AUST	H		A	AQE/AQD	y
Asteraceae	* Dittrichia graveolens					H		A		
Asteraceae	Euchiton sphaericus				>AUST	H		P		
Asteraceae	Hyalosperma cotula				WA	H		A		
Asteraceae	* Hypochaeris glabra					H		A		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Asteraceae	<i>Lagenophora huegelii</i>				AUST	H		PAB		
Asteraceae	<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>				AUST	H		A		
Asteraceae	<i>Myriocephalus helichrysoides</i>			e	WA	H		A	AQD	y
Asteraceae	<i>Myriocephalus isoetes</i>				WA	H		A	AQD	
Asteraceae	<i>Olearia paucidentata</i>				WA	SH		P		
Asteraceae	<i>Podolepis gracilis</i>				AUST	H		A		
Asteraceae	<i>Podolepis gracilis</i> (Swamp form) (GJ Keighery 13126)			h,v	WA	H		A		y
Asteraceae	<i>Quinetia urvillei</i>				AUST	H		A		
Asteraceae	<i>Rhodanthe pyrethrum</i>	3		p,s,h	WA	H		A	AQD	
Asteraceae	<i>Senecio multicaulis</i> subsp. <i>multicaulis</i>				AUST	H		P		
Asteraceae	<i>Siloxerus humifusus</i>				WA	H		A		
Asteraceae	* <i>Sonchus oleraceus</i>					H		A		
Asteraceae	* <i>Ursinia anthemoides</i>					H		A		
Asteraceae	<i>Waitzia suaveolens</i> var. <i>suaveolens</i>				WA	H		A		
Brassicaceae	* <i>Brassica tournefortii</i>					H		A		
Callitrichaceae	* <i>Callitriche hamulata</i>					H		P	AQE	
Callitrichaceae	* <i>Callitriche stagnalis</i>					H		P	AQE	
Campanulaceae	* <i>Wahlenbergia capensis</i>					H		A		
Campanulaceae	<i>Wahlenbergia preissii</i>				AUST	H		A		
Campanulaceae	<i>Wahlenbergia stricta</i>			d	AUST	H		P		
Caryophyllaceae	* <i>Cerastium glomeratum</i>					H		A		
Caryophyllaceae	* <i>Petrorhagia dubia</i>					H		A		
Caryophyllaceae	* <i>Silene nocturna</i>					H		A		
Caryophyllaceae	* <i>Stellaria media</i>					H		A		
Casuarinaceae	<i>Allocasuarina humilis</i>				WA	SH		P		
Crassulaceae	<i>Crassula closiana</i>				AUST	H		A		
Crassulaceae	<i>Crassula colorata</i> var. <i>colorata</i>				>AUST	H		A		
Crassulaceae	<i>Crassula exserta</i>				AUST	H		A		
Crassulaceae	* <i>Crassula natans</i> var. <i>minus</i>					H		A	AQS/AQE/AQD	
Crassulaceae	<i>Crassula peduncularis</i>				>AUST	H		A		
Cuscutaceae	* <i>Cuscuta epithimum</i>					H	CL	A-PAR		
Dilleniaceae	<i>Hibbertia acerosa</i>				WA	SH		P		
Dilleniaceae	<i>Hibbertia hypericoides</i>				WA	SH		P		
Dilleniaceae	<i>Hibbertia stellaris</i>				WA	SH		P		y
Dilleniaceae	<i>Hibbertia subvaginata</i>				WA	SH		P		
Dilleniaceae	<i>Hibbertia vaginata</i>				WA	SH		P		
Droseraceae	<i>Drosera bulbigena</i>			e	WA	H		PAB		
Droseraceae	<i>Drosera bulbosa</i> subsp. <i>bulbosa</i>				WA	H		PAB		y
Droseraceae	<i>Drosera erythrorhiza</i> subsp. <i>erythrorhiza</i>				WA	H		PAB		
Droseraceae	<i>Drosera gigantea</i> subsp. <i>gigantea</i>				WA	H		PAB		y

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Droseraceae	<i>Drosera glanduligera</i>				AUST	H		A		
Droseraceae	<i>Drosera macrantha</i> subsp. <i>macrantha</i>				WA	H		PAB		
Droseraceae	<i>Drosera marchantii</i> subsp. <i>marchantii</i>				WA	H		PAB		
Droseraceae	<i>Drosera menziesii</i> subsp. <i>menziesii</i>				WA	H		PAB		
Droseraceae	<i>Drosera menziesii</i> subsp. <i>penicillaris</i>				WA	H		PAB		
Droseraceae	<i>Drosera nitidula</i> subsp. <i>nitidula</i>				WA	H		PAA		y
Droseraceae	<i>Drosera pulchella</i>				WA	H		PAA		
Droseraceae	<i>Drosera rosulata</i>				WA	H		PAB		y
Droseraceae	<i>Drosera stolonifera</i> subsp. <i>porrecta</i>				WA	H		PAB		
Droseraceae	<i>Drosera stolonifera</i> subsp. <i>stolonifera</i>				WA	H		PAB		
Droseraceae	<i>Drosera tubaestylis</i>				WA	H		PAB		
Droseraceae	<i>Drosera zonaria</i>				WA	H		PAB		
Elatinaceae	<i>Elatine gratioloides</i>				AUST	H		A/P	AQE/AQD	
Epacridaceae	<i>Astroloma ciliatum</i> (glabrous form)				WA	SH		P		
Epacridaceae	<i>Astroloma pallidum</i>				WA	SH		P		
Epacridaceae	<i>Leucopogon propinquus</i>				WA	SH		P		
Epacridaceae	<i>Lysinema ciliatum</i>				WA	SH		P		
Euphorbiaceae	* <i>Euphorbia peplus</i>					H		A		
Euphorbiaceae	<i>Phyllanthus calycinus</i>				WA	H		P		
Euphorbiaceae	<i>Poranthera microphylla</i>				WA	H-SH		P		
Euphorbiaceae	<i>Stachystemon vermicularis</i>				WA	SH		P		
Gentianaceae	* <i>Centaurium erythraea</i>					H		A		
Gentianaceae	* <i>Cicendia filiformis</i>					H		A		
Geraniaceae	* <i>Erodium botrys</i>					H		A		
Geraniaceae	* <i>Erodium cicutarium</i>					H		A		
Geraniaceae	<i>Geranium solanderi</i>				AUST	H		A/P		
Geraniaceae	* <i>Pelargonium capitatum</i>					H-SH		P		
Geraniaceae	<i>Pelargonium littorale</i> subsp. <i>littorale</i>				AUST	H		A/P		
Goodeniaceae	<i>Anthotium junciforme</i>	4		p,s	WA	H		A/P		
Goodeniaceae	<i>Dampiera alata</i>				WA	H-SH		P		
Goodeniaceae	<i>Dampiera linearis</i>				WA	H-SH		P		
Goodeniaceae	<i>Goodenia coerulea</i>				WA	H-SH		P		
Goodeniaceae	<i>Goodenia micrantha</i>				WA	H		P		y
Goodeniaceae	<i>Goodenia pulchella</i> subsp. <i>Coastal Plain B</i> (L.W. Sage 2336) PN				WA	H		P		
Goodeniaceae	<i>Lechenaultia biloba</i>				WA	H-SH		P		
Goodeniaceae	<i>Scaevola lanceolata</i>				WA	H-SH		P		y
Goodeniaceae	<i>Scaevola phlebopetala</i>				WA	H-SH		P		
Goodeniaceae	<i>Velleia trinervis</i>				WA	H		P		y
Haloragaceae	<i>Gonocarpus pthyoides</i>				WA	H		P		
Haloragaceae	<i>Myriophyllum echinatum</i>	3		p,e	WA	H		A	AQD	y

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Lamiaceae	<i>Hemiandra pungens</i>			h,v	WA	SH	PR	P		
Lauraceae	<i>Cassytha flava</i>				WA	H	CL	P-PAR		
Lauraceae	<i>Cassytha glabella</i>				WA	H	CL	P-PAR		
Lauraceae	<i>Cassytha micrantha</i>				WA	H	CL	P-PAR		y
Lauraceae	<i>Cassytha pomiformis</i>				WA	H	CL	P-PAR		
Lauraceae	<i>Cassytha racemosa</i>				AUST	H	CL	P-PAR		
Lentibulariaceae	<i>Utricularia multifida</i>			h	WA	H		A	AQD	y
Lobeliaceae	<i>Isotoma hypocrateriformis</i>				WA	H		A		
Lobeliaceae	<i>Isotoma pusilla</i>				WA	H		A		
Lobeliaceae	<i>Isotoma scapigera</i>				WA	H		A		
Lobeliaceae	<i>Lobelia tenuior</i>				WA	H		A		
Loganiaceae	<i>Phyllangium palustre</i>	2		p,h	WA	H		A	AQD	
Loganiaceae	<i>Phyllangium paradoxum</i>				WA	H		A		
Loranthaceae	<i>Nuytsia floribunda</i>				WA	T		P-PAR		
Menyanthaceae	<i>Villarsia submersa</i>	4		p,s, h	WA	H		PAB	AQS	
Mimosaceae	<i>Acacia applanata</i>				WA	SH		P		
Mimosaceae	<i>Acacia barbinervis</i> subsp. <i>barbinervis</i>				WA	SH		P		
Mimosaceae	<i>Acacia dentifera</i>				WA	SH		P		
Mimosaceae	<i>Acacia extensa</i>				WA	SH		P		
Mimosaceae	<i>Acacia huegelii</i>				WA	SH		P		
Mimosaceae	<i>Acacia incurva</i>				WA	SH		P		
Mimosaceae	<i>Acacia lasiocarpa</i>				WA	SH		P		
Mimosaceae	<i>Acacia lateriticola</i>				WA	SH		P		
Mimosaceae	<i>Acacia nervosa</i>				WA	SH		P		
Mimosaceae	<i>Acacia pulchella</i>				WA	SH		P		
Mimosaceae	<i>Acacia pulchella</i> var. <i>glaberrima</i>				WA	SH		P		
Mimosaceae	<i>Acacia saligna</i>				WA	SH		P		
Mimosaceae	<i>Acacia stenoptera</i>				WA	SH		P		
Mimosaceae	<i>Acacia urophylla</i>				WA	SH		P		
Mimosaceae	<i>Acacia willdenowiana</i>				WA	SH-H		P		
Myoporaceae	<i>Eremophila glabra</i>				AUST	SH		P		
Myrtaceae	<i>Astartea</i> aff. <i>fascicularis</i> (Gibson et al. 1994)				WA	SH		P		y
Myrtaceae	<i>Astartea affinis</i>				WA	SH		P		y
Myrtaceae	<i>Baeckea camphorosmae</i>			h,v	WA	SH		P		
Myrtaceae	<i>Calytrix angulata</i>				WA	SH		P		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Myrtaceae	Darwinia citriodora				WA	SH		P		
Myrtaceae	Eucalyptus calophylla				WA	T		P		
Myrtaceae	Eucalyptus marginata subsp. marginata				WA	T		P		
Myrtaceae	Eucalyptus rudis				WA	T		P		y
Myrtaceae	Hypocalymma angustifolium				WA	SH		P		y
Myrtaceae	Hypocalymma robustum				WA	SH		P		
Myrtaceae	Kunzea micrantha subsp. micrantha				WA	SH		P		y
Myrtaceae	Kunzea recurva				WA	SH		P		y
Myrtaceae	* Leptospermum laevigatum					SH		P		
Myrtaceae	Melaleuca incana				WA	SH		P		y
Myrtaceae	Melaleuca lateritia				WA	SH		P		y
Myrtaceae	Melaleuca pauciflora				WA	SH		P		y
Myrtaceae	Melaleuca preissiana				WA	T		P		y
Myrtaceae	Melaleuca raphiopylla				WA	T		P		y
Myrtaceae	Melaleuca thymoides				WA	SH		P		
Myrtaceae	Melaleuca viminea subsp. viminea				WA	SH		P		y
Myrtaceae	Pericalymma ellipticum var. floridum				WA	SH		P		
Myrtaceae	Verticordia densiflora				WA	SH		P		
Myrtaceae	Verticordia densiflora var. densiflora				WA	SH		P		
Myrtaceae	Verticordia huegelii var. stylosa				WA	SH		P		
Myrtaceae	Verticordia pennigera				WA	SH		P		
Myrtaceae	Verticordia serrata				WA	SH		P		
Onagraceae	Epilobium billardioreanum				WA	H		P		y
Onagraceae	* Oenothera glazioviana					H		P		
Orobanchaceae	* Orobanche minor					H		A-PAR		
Oxalidaceae	Oxalis perennans				AUST	H		PAB		
Oxalidaceae	* Oxalis pes-caprae					H		PAB		
Oxalidaceae	* Oxalis polyphylla					H		PAB		
Oxalidaceae	* Oxalis purpurea					H		PAB		
Papilionaceae	Bossiaea eriocarpa				WA	SH		P		
Papilionaceae	Bossiaea sp. Waroona (B.J. Keighery & N. Gibson 229) PN			t	WA	SH		P		
Papilionaceae	Daviesia angulata				WA	SH		P		
Papilionaceae	Daviesia costata				WA	SH		P		
Papilionaceae	Daviesia inflata				WA	SH		P		
Papilionaceae	Daviesia longifolia				WA	SH		P		
Papilionaceae	Daviesia physodes				WA	SH		P		
Papilionaceae	Daviesia preissii				WA	SH		P		
Papilionaceae	Eutaxia virgata				WA	SH		P		y
Papilionaceae	Gastrolobium capitatum				WA	SH		P		
Papilionaceae	Gompholobium aristatum				WA	SH		P		



Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Papilionaceae	Gompholobium confertum				WA	SH		P		
Papilionaceae	Gompholobium marginatum				WA	SH		P		
Papilionaceae	Gompholobium polymorphum				WA	SH	CL	P		
Papilionaceae	Hardenbergia comptoniana				WA	SH	CL	P		
Papilionaceae	Hovea trisperma var. grandiflora			t	WA	SH		P		
Papilionaceae	Hovea trisperma var. trisperma			t	WA	SH		P		
Papilionaceae	Isotropis cuneifolia subsp. cuneifolia				WA	H-SH		P		
Papilionaceae	Jacksonia angulata				WA	SH		P		
Papilionaceae	Jacksonia sternbergiana				WA	SH-T		P		
Papilionaceae	Kennedia coccinea			s,h,v	WA	H	PR	P		
Papilionaceae	Kennedia prostrata				AUST	H	PR	P		
Papilionaceae	* Lotus angustissimus					H		A		
Papilionaceae	* Medicago polymorpha					H		A		
Papilionaceae	* Ornithopus compressus					H		A		
Papilionaceae	Sphaerolobium medium				WA	SH		P		
Papilionaceae	Templetonia biloba				WA	SH		P		
Papilionaceae	* Trifolium arvense var. arvense					H		A		
Papilionaceae	* Trifolium campestre var. campestre					H		A		
Papilionaceae	Viminaria juncea				AUST	SH-T		P		y
Pittosporaceae	Pronaya fraseri				WA	SH	CL	P		
Polygalaceae	Comesperma calymega				AUST	SH-H		P		
Polygalaceae	Comesperma polygaloides				WA	SH-H		P		
Polygalaceae	Comesperma virgatum				WA	SH-H		P		
Portulacaceae	Calandrinia brevipedata				AUST	H		A		
Portulacaceae	Calandrinia corrigioloides				AUST	H		A		
Portulacaceae	Calandrinia granulifera				AUST	H		A		
Primulaceae	* Anagallis arvensis					H		A		
Proteaceae	Adenanthos meisneri				WA	SH	PR	P		
Proteaceae	Banksia grandis				WA	T		P		
Proteaceae	Conospermum capitatum subsp. glabratum				WA	SH		P		
Proteaceae	Conospermum stoechadis subsp. stoechadis				WA	SH		P		
Proteaceae	Dryandra lindleyana				WA	SH	PR	P		
Proteaceae	Grevillea bipinnatifida subsp. pagna	l		p,s, h	WA	SH		P		
Proteaceae	Grevillea pilulifera				WA	SH		P		
Proteaceae	Hakea candolleana				WA	SH		P		
Proteaceae	Hakea ceratophylla				WA	SH		P		y
Proteaceae	Hakea lissocarpha				WA	SH		P		
Proteaceae	Hakea prostrata				WA	SH		P		
Proteaceae	Hakea sulcata				WA	SH		P		y
Proteaceae	Hakea varia			h,t	WA	SH		P		y
Proteaceae	Isopogon asper			s	WA	SH		P		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Proteaceae	<i>Persoonia saccata</i>				WA	SH		P		
Proteaceae	<i>Petrophile juncifolia</i>				WA	SH		P		
Proteaceae	<i>Petrophile linearis</i>				WA	SH		P		
Proteaceae	<i>Stirlingia latifolia</i>				WA	SH		P		
Proteaceae	<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>				WA	SH		P		
Proteaceae	<i>Xylomelum occidentale</i>				WA	T		P		
Ranunculaceae	<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>				AUST	H		A		
Rhamnaceae	<i>Trymalium floribundum</i>				WA	SH-T		P		
Rubiaceae	* <i>Galium murale</i>					H		A		
Rubiaceae	<i>Opercularia apiciflora</i>				WA	SH-H		P		
Rubiaceae	<i>Opercularia vaginata</i>				WA	SH-H		P		
Rutaceae	<i>Boronia crenulata</i>				WA	SH		P		
Rutaceae	<i>Boronia spathulata</i>				WA	SH		P		
Rutaceae	<i>Philothea spicata</i>				AUST	SH		P		
Santalaceae	<i>Leptomeria cunninghamii</i>				AUST	SH		P-PAR		
Scrophulariaceae	* <i>Bartsia trixago</i>					H		A		
Scrophulariaceae	<i>Glossostigma drummondii</i>				AUST	H		A		
Scrophulariaceae	<i>Gratiola pubescens</i>				AUST	H		A		y
Scrophulariaceae	* <i>Parentucellia latifolia</i>					H		A		
Solanaceae	* <i>Solanum nigrum</i>					H		A		
Stackhousiaceae	<i>Stackhousia pubescens</i>				WA	H-SH		P		
Stackhousiaceae	<i>Tripterococcus brunonis</i>				WA	H-SH		P		
Sterculiaceae	<i>Thomasia grandiflora</i>				WA	SH		P		
Stylidiaceae	<i>Levenhookia pusilla</i>				AUST	H		A		
Stylidiaceae	<i>Levenhookia stipitata</i>				WA	H		A		
Stylidiaceae	<i>Stylidium amoenum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium brunonianum</i> subsp. <i>brunonianum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium calcaratum</i>				AUST	H		A		
Stylidiaceae	<i>Stylidium carnosum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium crassifolium</i>				WA	H		P		
Stylidiaceae	<i>Stylidium dichotomum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium divaricatum</i>				WA	H		P		y
Stylidiaceae	<i>Stylidium ecorne</i>				AUST	H		A		y
Stylidiaceae	<i>Stylidium inundatum</i>				WA	H		A		y
Stylidiaceae	<i>Stylidium junceum</i> subsp. <i>junceum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium mimeticum</i>			p,s	WA	H		A		y
Stylidiaceae	<i>Stylidium piliferum</i> subsp. <i>piliferum</i>				WA	H		P		
Stylidiaceae	<i>Stylidium pulchellum</i>				WA	H		PAB		
Stylidiaceae	<i>Stylidium repens</i>				WA	H		P		
Stylidiaceae	<i>Stylidium roseonatum</i>				WA	H		A		

Family	Name	Significant Taxa			Aust/_WA	Growth/Life Forms			Wet taxa	
		WA	Com	OS		G1	G2	Life Form	AQ	C
Stylidiaceae	<i>Stylidium thesoides</i> (previously known as <i>S. canaliculatum</i> )				WA	H		P		
Stylidiaceae	<i>Stylidium utricularioides</i>			s	WA	H		A		y
Thymelaeaceae	<i>Pimelea imbricata</i> var. <i>major</i>			s,h	WA	SH		P		y
Violaceae	<i>Hybanthus calycinus</i>				WA	H-SH		P		
Violaceae	<i>Hybanthus floribundus</i>				WA	SH		P		

**C53 COOLUP RESERVES**

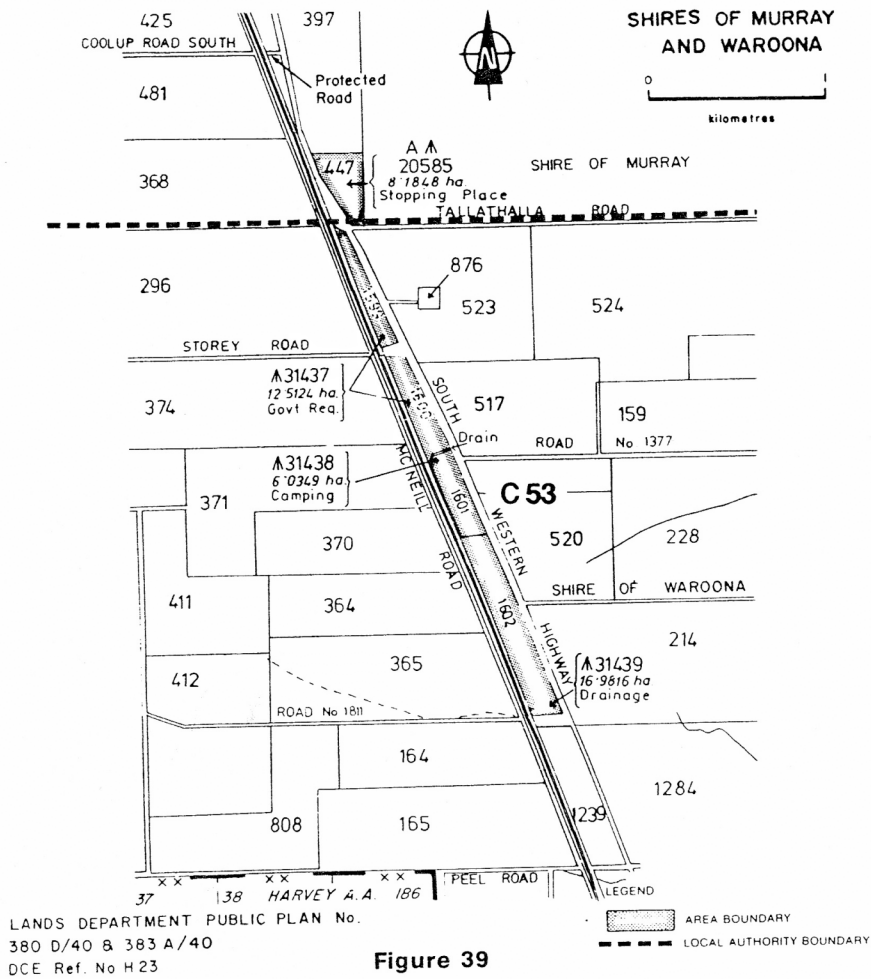
The recommended area is situated adjacent to the South Western Highway, about 12km south of Pinjarra, and comprises Reserves A20585, for Stopping Place, C31437, for Government Requirements, C31438, for Camping, and C31439, for Drainage, all not vested (Figure 39).

The area could be affected by future improvements of South Western Highway which may require additional land.

The area is almost flat, with a few shallow depressions which become wet in winter. It carries low woodland and open-woodland of marri and jarrah. There are several populations of black gin. The depressions carry closed to open-heath dominated by swamp tea-tree and *Hakea ceratophylla*. These Reserves are important because they contain the only uncleared land between Pinjarra and Waroona. They also carry the only vegetation of its type along the South Western Highway, and so are valuable for tourists.

**Recommendations:**

- C53.1 That the purpose of Reserve A20585 be amended to Conservation of Flora and Fauna and that the Reserve be vested in the W.A. Wildlife Authority.
- C53.2 That Reserves C31437, C31438 and C31439 be cancelled and their respective areas amalgamated to form a single Reserve for Roadside Verge Conservation, and that the Reserve be vested in the Shire of Waroona.
- C53.3 That any management plan for Reserves C31437, C31438 and C31439 be prepared in consultation with the Department of Fisheries and Wildlife.



**Figure 39**  
 FIGURE I : LOCATION OF C53; CTCR Report

Figure 2:

Vegetation Map C53 (Coolup Reserves) and adjacent bushland.



LEGEND

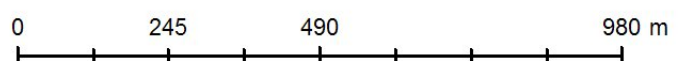
- Floristic sites
- Vegetation Units**
- Marri woodland
- Jarrah woodland
- Wetland mosaic
- Pines
- Rail/Road verge

The vegetation units depicted on this map were captured at a scale of 1:12500 from aerial photography and subsequently ground-truthed before final editing.

Data Sources:

Floristic Sites - Gibson N, Keighery BJ, Keighery GJ, Burbidge AH and Lyons MN 1994 - A Floristic Survey of the Southern Swan Coastal Plain. Unpublished Report for the Australian Heritage Commission prepared by the Department of Conservation and Land Management and the Conservation Council of WA, Perth, Western Australia

Aerial Photography - Landgate - Swan Coastal Plain South 2005.



Projection: Map Grid of Australia Zone 50  
Datum: Geocentric Datum of Australia, 1994

LOCALITY MAP

