

## COTTONWOOD CRESCENT, DIANELLA

**Boundary Definition:** bushland (part taken to cadastre) boundary

### **SECTION 1: LOCATION INFORMATION**

**Bush Forever Site no.** 43

**Area (ha):** bushland 11.3

**Map no.** 41

**Map sheet series ref. no.** 2034-II SW

**Other Names:** not known

**Local Authorities (Suburb):** City of Stirling (Dianella)

### **SECTION 2: REGIONAL INFORMATION**

#### **LANDFORMS AND SOILS**

##### **Spearwood Dunes**

Sands derived from Tamala Limestone (Qts: S7)

#### **VEGETATION AND FLORA**

##### **Vegetation Complexes**

###### **Spearwood Dunes**

Karrakatta Complex — Central and South

##### **Floristic Community Types**

###### **Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau**

23a Central *Banksia attenuata* — *B. menziesii* woodlands

#### **WETLANDS**

No wetlands mapped

#### **THREATENED ECOLOGICAL COMMUNITIES**

Not assessed

### **SECTION 3: SPECIFIC SITE DETAIL**

**Landscape Features:** vegetated uplands

**Vegetation and Flora:** limited survey (DEP 1996 (Tele 01))

#### **Structural Units**

Uplands: *Banksia menziesii* and *B. attenuata* Low Open Woodland to Woodland with scattered *Banksia ilicifolia*, *Allocasuarina fraseriana* and *Nuytsia floribunda*; *Allocasuarina humilis*, *Jacksonia densiflora* and *Eremaea pauciflora* Open Heath

**Vegetation Condition:** >75% Very Good to Excellent, <25% Good to Degraded, with areas of severe localised disturbance

**Total Flora:** 73 native taxa, 7 weed taxa (plot-generated list only and adjacent records, estimated >50% expected flora)

**Significant Flora:** *Cyathochaeta equitans* (most western population in the PMR)

**Fauna:** structured survey for birds (27 species), native mammals (1 species), reptiles (15 species) and amphibians (2 species) (How *et al.* 1996). Significant bird species: category 1 (1) and category 4 (1). Significant mammal species: Western Grey Kangaroo. Significant reptile species: a skink (*Morethia lineocellata*)

**Linkage:** adjacent bushland to the south

### **SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE**

Subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

### **SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS**

**Criteria:** Representation of ecological communities, Rarity, Diversity, Criteria not relevant to determination of regional significance, but which may be applied when evaluating areas having similar values

**Recommendation:** Part A: Site with Some Existing Protection; existing Parks and Recreation Reserve. Part B: Other Government Lands Mechanism. Part C: Urban Negotiated Planning Solution (see Table 3, Volume 1).

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### SECTION 1: CADASTRAL INFORMATION

(Lots, locations and derived information to be updated in the public submission period)

**Bushplan Site no.** 43      **Map no.** 50      **Map sheet series ref. no.** 2034-II SW

**Other Names:** not known

**Area (ha):** total 12.1; bushland 11.3

**Local Authorities (Suburb)**

**Zoning**

City of Stirling (Dianella)

**MRS:** Urban, Parks and Recreation, Public Purposes-High School

**TPS:** Landscape, Special Use

### Ownership Categories

State Government, Private (commercial organisation)

**Lot/Location/Reserve numbers (Purpose),**

**Street name**

50, 10471, 10770 Cottonwood Cr; 9 Osborne Rd; 10977 Dianella Dr

Crown Reserve

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

##### Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

#### VEGETATION AND FLORA

##### Vegetation Complexes

###### Spearwood Dunes

Karrakatta Complex — Central and South

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No wetlands mapped

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Not assessed

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#### Structural Units

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**Vegetation Condition:** >75% Very Good to Excellent, <25% Good to Degraded, with areas of severe localised disturbance

**Total Flora:** 73 native taxa, 7 weeds (plot-generated list only and adjacent records, estimated >50% expected flora)

**Significant Flora:** *Cyathochaeta clandestina* (most western population in the PMR)

**Fauna:** multiple and structured surveys by Western Australian Museum of Natural Science (How *et al.* 1996) for birds (27), native mammals (1), reptiles (15) and amphibians (2) (How *et al.* 1996). Significant bird species: category 1 (1) and category 4 (1). Significant mammal species: Western Grey Kangaroo. Significant reptile species: a skink (*Morethia lineocellata*)

**Linkage:** adjacent bushland to the south

### SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

### SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

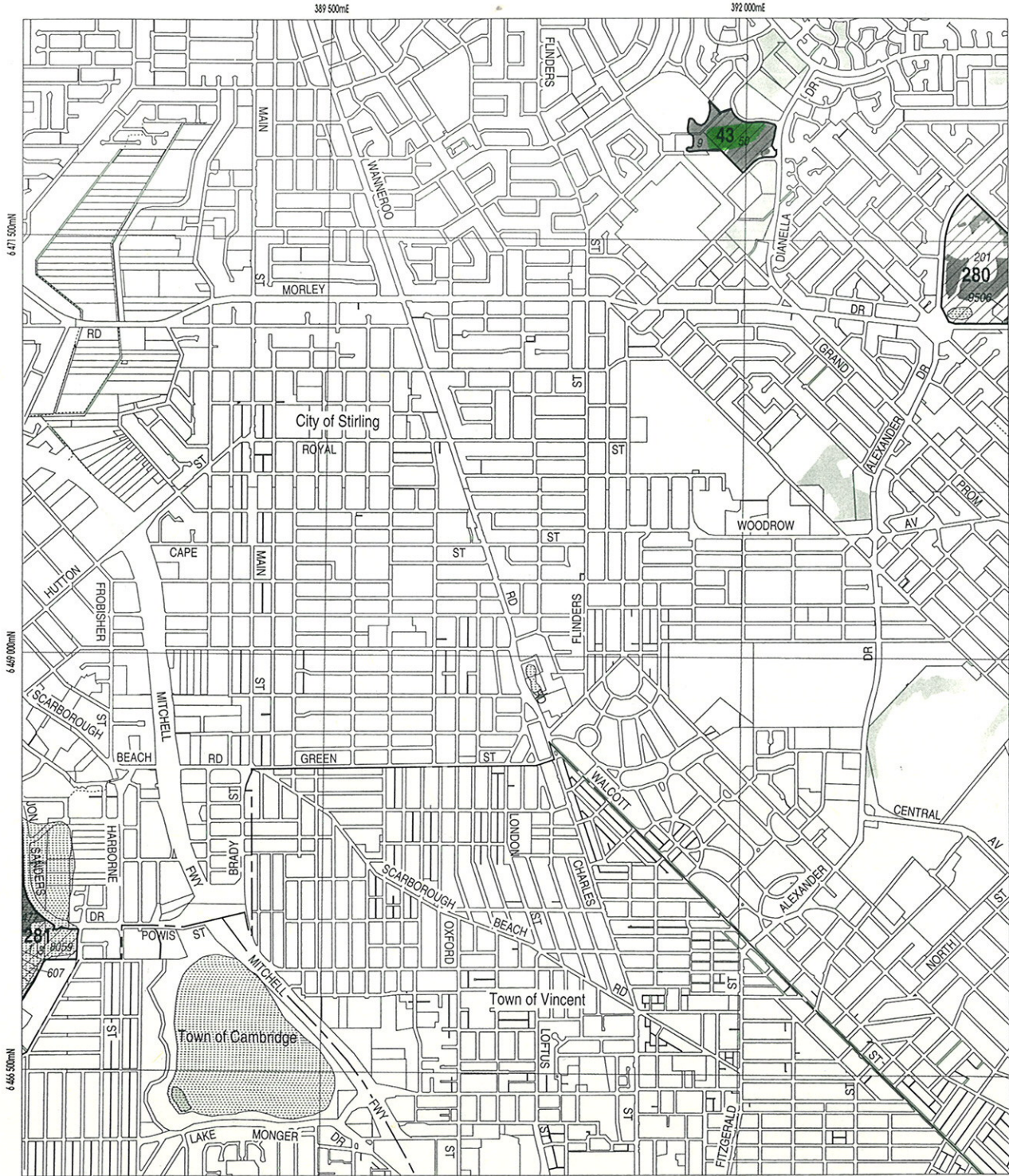
**Criteria:** Representation of ecological communities, Rarity, Diversity, Criteria not relevant to determination of conservation value, but which may be applied when evaluating areas having similar values

#### Opportunities and/or Constraints

**Opportunities:** Bushplan Site/part Bushplan Site subject to Swan and Canning Rivers EPP; location of Scheduled Fauna; under MRS Parks and Recreation Reservation and TPS Landscape Zoning, Planning Control Area No. 30, Crown Reserve

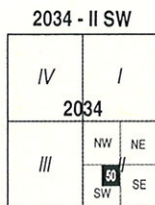
**Constraints:** private land; under MRS Urban Zoning

**Recommendation:** The most appropriate mechanism for the protection of this Bushplan Site be considered through the public comment period in consultation with the land owner(s).

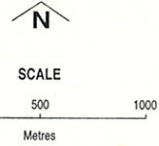
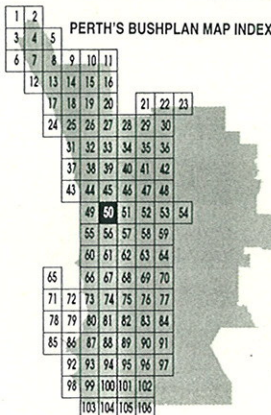


**LEGEND**

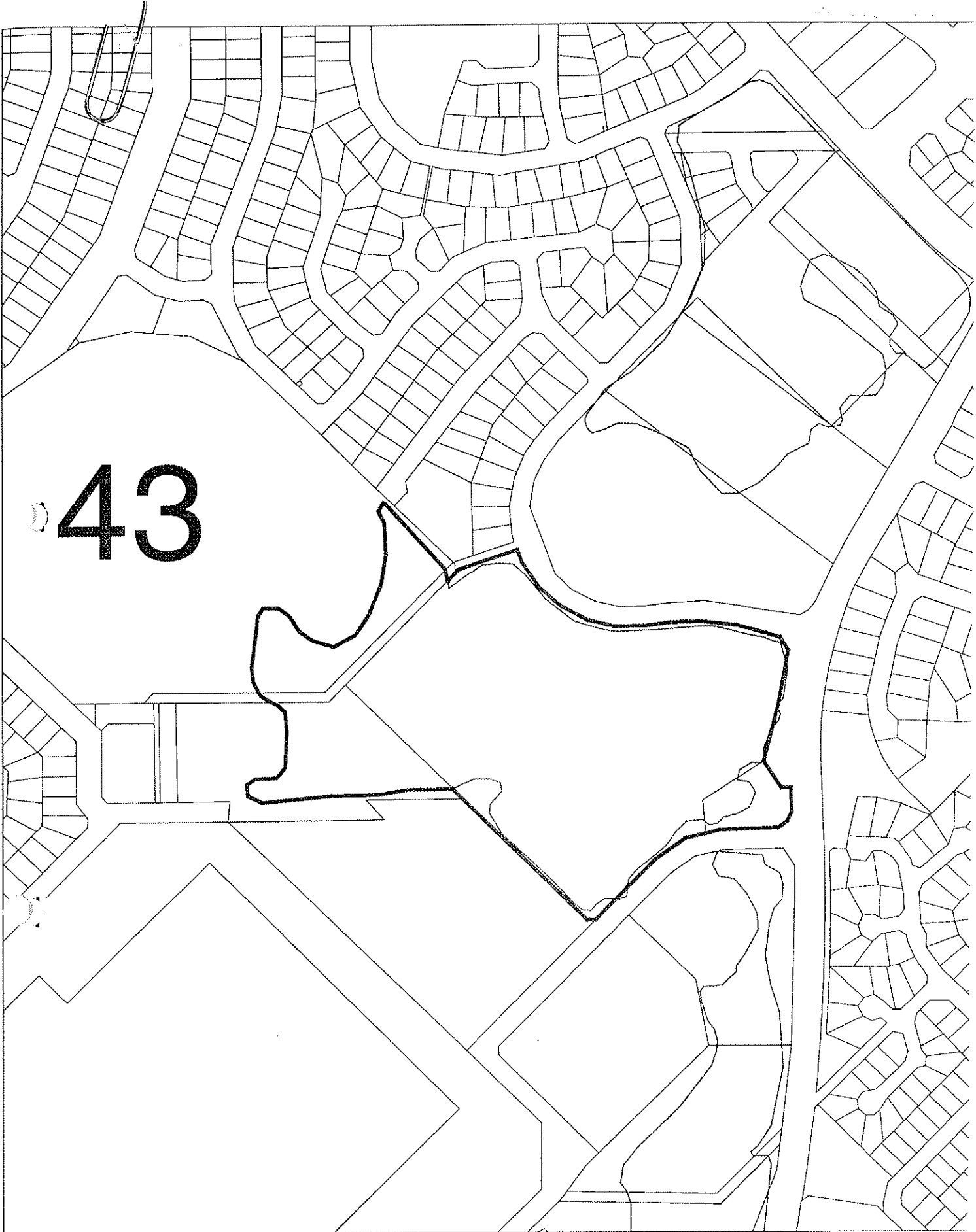
- 472 Bushplan Sites With Regionally Significant Bushland
- Other Native Vegetation
- Conservation Category Wetlands
- Bushplan Sites With Some Existing Protection
- 696 Lot Number, Location Number
- Channel Wetlands
- Local Government Boundary



1 : 25 000 AMG Reference Grid showing Perth's Bushplan Map Sheet Breakdown



Produced by Project Mapping Section  
 Land Information Branch, Ministry for Planning, Perth W.A. November 1998  
 ntw-map18/environ/bushplan/bushv2\_50.dgn  
 Cadastral Data supplied by Department of Land Administration, W.A.  
 Wetlands Data supplied by Water and Rivers Commission  
 Native Vegetation Extent for Study Area supplied by Agriculture Western Australia



**BUSHPLAN SITES CORRECTED**



WESTERN  
AUSTRALIAN  
PLANNING  
COMMISSION



*B BK/14 21/10/70*



SCALE 1:2500



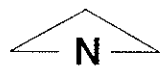
Metres

43

BUSHPLAN SITES CORRECTED



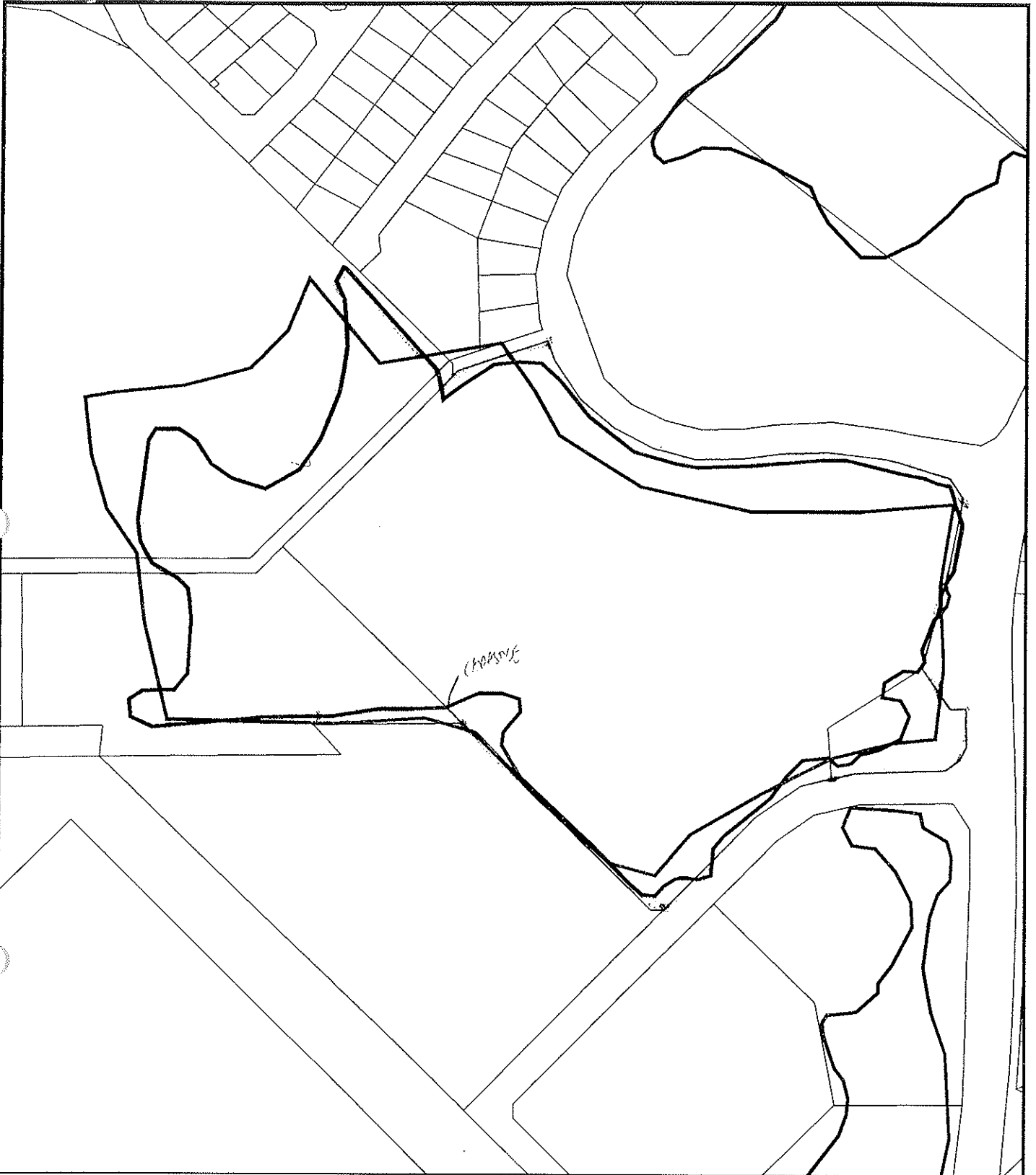
WESTERN  
AUSTRALIAN  
PLANNING  
COMMISSION






SCALE 1:2500



Metres



## bp site 43

-  AG VEG 1998 BOUNDARY THEME
-  Bushplan sites refno 1-500 SCP BOUNDARY THEME
-  Cadastre

MFP INTERNAL USE ONLY

Prepared By: Andrea Zappacosta

Prepared For:

Map Ident: plot980515\_1

Date: 15 May 98

Scale 1:3601

# COTTON WOOD CRESC

No Library Fees

# SYSTEM 6 BUSHLAND SUBMISSION FORM FOR CONSIDERATION IN THE UPDATE PROGRAMME

If you wish to submit more than one area for consideration in the System 6 update, please use a separate form for each area.

Please fill in each section giving as much information as possible.

**LOCATION, OWNERSHIP AND ZONING OF THE AREA**

### 1. Location

Please give as accurate and detailed a description as possible of the site location

Please include either a hand drawn or copied map showing the area of the area

a) Bordering Roads: DIANELLA DR, CALTONWOOD CREES, JOY ST

b) Nearest Corner: DIANELLA DRIVE

c) Lot Number: 50 Street Number: .....

d) Town/Suburb/Location: DIANELLA

e) Local Council: STIRLING

f) Site Name (if any): 9 007 HA

g) Approximate size of the area (ha): 9 007 HA

h) Please locate the area on a map and give us map references if possible:

MAP ATTACHED

i) Map: ..... Streetsmart /UBD/Other: .....

j) Map no.: 46

k) Grid Ref: E 6

l) Please give any other information that may help us to find the location:

TELEVISION NETWORKS

m) Are you aware of any development proposals that are likely to affect the area?

NO

**NOTE: Areas that have already been given development APPROVAL should not be nominated**

Please fill out those questions that you can answer

2. Who owns the area? (If owned by the person/s making the nomination please indicate) ..... LIQUIDATION ..... REAL ESTATE ..... RICHARD ELLIS .....

3. If you own the area, and may be interested in participating in conservation on private land initiatives please indicate (and leave your name and address at the end of this submission form) .....

4. What is the area zoned? (please indicate whether zoning is Town Planning Scheme or Metropolitan Region Scheme) ..... SPECIAL USE MEDIA EST .....

CAN YOU TELL US A LITTLE ABOUT THE PHYSICAL CHARACTERISTICS OF THE AREA

5. Why do you consider this area important? (Refer to Guiding Issues paper)  
*Primarily the banks woodland is a natural haven for native animals, especially those who have lost their habitat due to the extensive development surrounding this pocket of land. Secondly it has a diverse array of native plant species including orchids and approx 5 tree species.*

6. What is/are the soil type/s and colours ? ..... GREY SAND .....

Type: Sand/Clay/Gravel/Loam/Silt  
Colour: White/Grey/Brown/Orange/Yellow/Red/Black

7. Does the area have any special features such as unusual landforms / landscapes that still retain their natural vegetation? Yes/No

If yes, what are they? ..... NATURAL BANKS WOODLAND .....

8. Is the area a wetland or does it include a wetland? ..... NO .....

If yes, what kind of a wetlands is it?

- a) lake
- b) river
- c) stream
- d) swamp
- e) estuary
- f) seasonally wet
- g) other

9. What percentage of the wetland is open water in summer? .....

CAN YOU TELL US A LITTLE ABOUT THE VEGETATION /FAUNA ON THE NOMINATED AREA.

10. What percentage of the area is indigenous vegetation? ..... 85-90% .....

11. If the area includes regions cleared of native bushland please indicate reasons for the inclusion. .... FIRE BREAKS ..... APPROX 10 SQ. M. OLD EARTH ..... STATION TORN DOWN .....

12. Has any previous flora or fauna survey work been done on the area? ..... YES .....

If yes, please give details of the work ..... TO MY KNOWLEDGE ONE SURVEY ..... FROM UNIVERSITY OF SIDER POPULATIONS .....

13. How would you rate the condition of the native bushland? (see attached table)

- a) pristine
- b) excellent ✓
- c) very good
- d) good
- e) degraded
- f) completely degraded
- g) don't know

14. Please indicate the disturbances affecting the area and where appropriate the percentage of the area disturbed.

- a) Partial clearing REMOVED BUILDING .
- b) fragmentation
- c) Selective removal of species: timber cutting, wildflower picking, mowing dieback and other plant diseases
- d) Fire regime, including intensity, season and frequency
- e) 'Enrichment plantings' that is plantings of species not found in that community
- f) Weed invasion SOME PERIMETERS & REMOVED BUILDING .
- g) Animal impact: horses, foxes, rabbits, cats, dogs, camels, goats etc
- h) Soil movement, both removal and dumping
- i) Changes in water regimes; flooding, drainage and watering
- j) Salinity
- k) Fertiliser drift and along waterways nutrient influx
- l) Mining, including that for road works

- m) Grazing: stock, overgrazing by feral or native mammals
- n) Proliferation of tracks, fire breaks and walk trails ✓
- o) Off-road vehicle use
- p) Use as service corridors by the SEC, Main Roads, Water Authority.

(Source: B Keighery. Bushland Plant Survey, September 1994)

15. Does the area contain any plant species of special interest that you know of? (eg. declared rare flora, priority taxa, outlier populations) .....

Do you know what they are? ..... *not qualified to answer* .....

16. Do you know of any native animals that use the area? ..... *YES* .....

Can you list those you know of? (birds, mammals, reptiles, amphibians etc)

*6. HICKED GREY Kangaroo's, Honey Eaters, Whistlers, Pardalotes, Kestrels, Pardalote Kookaburra's, Black Cockatoos, SUGARS, LIZARDS, FROGS, 28, Paerangis*

17. Is the area used by any native animals of special interest? (eg. endangered species, large/important populations).....

If yes, please name them and indicate source of information

**CAN YOU TELL US A LITTLE ABOUT THE SURROUNDING AREA**

18. Are there any bushland areas (including wetlands) near to this area?

*YES - HONEYCREEPER*

If yes, how close are they? ..... *1 KM* .....

Are they already conservation reserves? ..... *NO - NOT TO MY KNOWLEDGE* .....

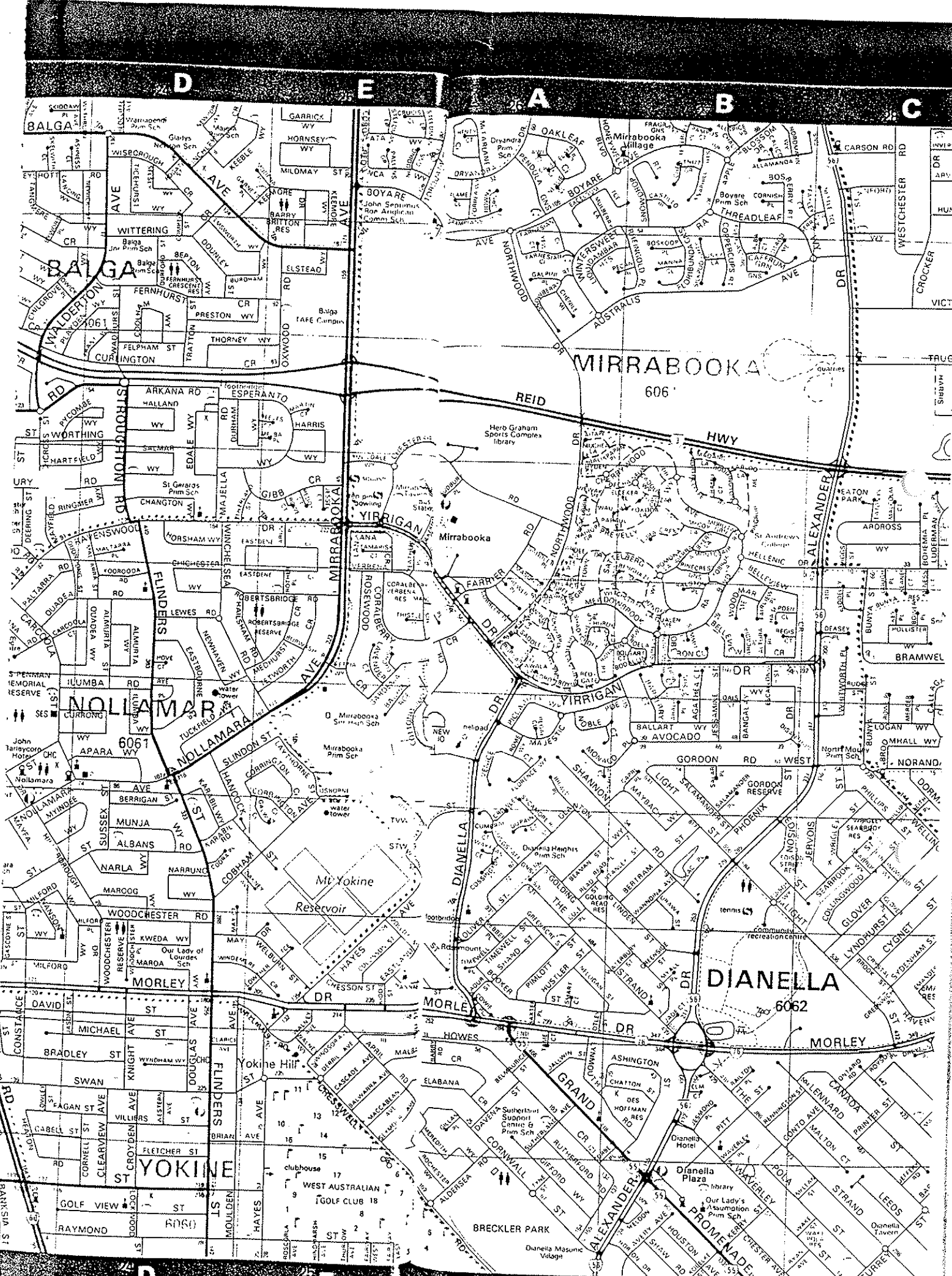
What is their approximate size? ..... *APPROX 9,000 HA* .....

19. Does the submitted area link other bushland areas? .....

*NO*

Please attach any additional information about the area which may be of use when assessing it.

D E A B C



2 km  
 PRIMARY RECTANGLE  
 PERTH BG 34

POLICE STATION  
 HOSPITAL  
 POST OFFICE  
 PUBLIC TELEPHONE  
 TRAFFIC FLOW  
 TRAFFIC LIGHTS

NATIONAL TRUST OF AUSTRALIA (WA)  
LANDSCAPE ASSESSMENT FORM  
NATURAL AND CULTURAL LANDSCAPES - Dianella Bushland

I. IDENTIFICATION AND LOCATION

Current Name of Place: Dianella Bushland (Includes Lot 50 Cottonwood Crescent and other remnants)

Other Names: Media Bushland

Location: Dianella Drive, Dianella. The area comprises a series of blocks of remnant bushland amounting to approximately 26 hectares in size between Morley Drive and Yirrigan Drive, west of Dianella Drive. Much of the area lies within the 'Special Media Use' Zone as shown in the City of Stirling's Town Planning Scheme. Lot 50 Cottonwood Crescent sits between the television stations 10 to the north and 9 and 7 to the south and southwest. All parts are presented as a virtually unbroken and important corridor of bushland and form the nominated place.

Local Government Authority: City of Stirling

Size: Area of bushland only in each block: 1] -0.3ha 2] 5.488ha 3] 0.628ha  
4] 9.007ha 5] -1.0ha 6] 0.160ha 7] -9ha TOTAL ~26ha  
See below for name of each block.

Map Reference 1:100,000 Map Name: Swan Location U, on Plan 15281

Latitude:

Longitude:

Land Tenure:

If freehold, current owner: Please see Appendix A for Title Details.

1] Reserve 40336 Bushland corner Hayes Ave and Molloy St

City of Stirling

Civic Place, Stirling 6021

Reserve No. 40336

2] Channel 9 Bushland

Channel Nine

Gay Street, Dianella 6062

Lot No. Lot 1 Gay Street and Lot 13 Hayes Avenue

3] Channel 7 Bushland

Channel Seven

Osborne Road, Tuart Hill 6060

Lot No. Lot 9 Osborne Park Road near Joy Street

4] Lot 50 Cottonwood Crescent

Bond Holdings Ltd and Citigroup Ltd,

Under control of KPMG Peat Marwick (Liquidators)

152 St Georges Terrace, Perth 6000

Lot No. 50 Cottonwood Crescent

5] Media Bushland

6/ Channel 10 Bushland

Channel Ten

Cottonwood Crescent, Dianella. 6062

Lot No. Lot 55 Cottonwood Crescent (developed except for 0.160ha)

7/ Homeswest Bushland

Homeswest

99 Plain Street, East Perth 6004

Lot No. Lot 56 Cottonwood Crescent and Part Location U (corner Dianella and Yirrigan Drive, and Cottonwood Crescent)

Current Land Use: Special Media Use, Channels 7, 9 and 10 currently located here. Surrounding area urban (housing). Two large blocks not developed for media use.

Landform: Bassendean/Karrakatta Dunes

Vegetation Types: Banksia woodland with jarrah.

Special landscape features: High dune ridge rises sharply affording in places uninterrupted views of the Darling Scarp.

## 2. DESCRIPTION

The bushland is high in the landscape, on a ridge-line of Bassendean/Karrakatta dunes - on the east of the transition zone is the Bassendean soil type. Its east-facing slopes give uninterrupted views of the Darling Scarp. Most is Bassendean sand overlaying Karrakatta sand, with the latter occurring at the surface close to Dianella Drive.

The bushland is predominantly *Banksia attenuata* and *B. menziesii* woodland with moderate numbers of *Eucalyptus marginata* (Jarrah), including a few large trees. Other trees species occurring in small numbers are *Allocasuarina fraseriana*, *Nyctia floribunda* and *B. grandis*. Also well represented are grass trees - *Xanthorrhoea preissii*.

The understory is generally half to one metre high and diverse, with over 100 species predominantly from the families: Papilionaceae (eg *Bossia eriocarpa*), Iridaceae (eg *Patersonia occidentalis*), Myrtaceae (eg *Lepidosperma* spp), Myrtaceae (eg *Melaleuca trichophylla*, *Calothamnus sanguineus*, *Eremaea pauciflora*), Proteaceae (eg *Petrophile linearis*, *Sitrlingia latifolia*), Haemodoraceae (eg *Conostylis* spp), Dilleniaceae (eg *Hibbertia* spp) and Mimosaceae (eg *Acacia* spp). The herb layer consists of *Drosera* spp, *Stylidium* spp, orchids and annuals. In total 117 naturally occurring species have been identified (Pike, 1994) in Lot 50, and are listed in the attachment. A rich invertebrate fauna is evident, some studies have been carried out by the WA Museum as part of an NEGP program for the Heritage Council of WA.

Up to ten (including four young) Western Grey Kangaroos (*Macropus fuliginosus*) occur here as well as a now uncommon species of legless lizard (*Pletholax gracilis*) and the Turtle Frog (*Myobatrachus gouldii*) [How et al 1994]. This frog (the only local frog without a tadpole stage) is rarely sighted, living underground in banksia woodland.

Lot 50 also retains the remnant of an old limestone road, approximately 100 metres long. According to a local, Ian Murray (ph 349 4533), the road used to run from Guildford or Bayswater to the coast, running parallel with and approximately 100m south of Balcatta Road. It used to pass through what is now Channel 7 and the Mt Yokine Reservoir. Another remnant remains at the SEC depot near the corner of Wanneroo and Balcatta Roads. Ian believes the road to be over 100 years old, and was

possibly used for transporting firewood. Unfortunately a search at the Battye Library for the route on old maps (1898, 1909 and 1945) was unsuccessful. Research is continuing on the subject.

### 3. CONDITION

Lot 50, Cottonwood Crescent is a 9.007 hectare fenced site in good to excellent condition. Patches of sand amongst the vegetation indicates a stable environment, with little weed invasion. Such patches are essential for the survival of some reptile species.

Disturbance is generally restricted to the few tracks and the margin adjoining Channel 7's entrance road, where the edge has been grassed and mown. The most common weed species include *Elythria calycina*, *Romulea rosea* var. *australis*, *Gladiolus caryophyllaceus*, *Lupinus mutabilis*, and *Chasmanthe floribunda*. One major site of disturbance is to the North, a cleared area with accumulated branch and building material. The latter two weed species are present here. Natural regeneration is occurring on the tracks.

Other signs of disturbance are minimal. The surrounding fence has kept four wheel drive vehicles, cats and dogs out of the area. There have been some recent deaths among the mature banksia trees, possibly as a result of the exceptionally long dry summer or as a result of jarrah dieback. There is evidence of a dieback front moving through the area (Ray Wills, pers. com. 1994, CALM). The limestone road section is in good condition and it is interesting to note the weedy strip alongside the road, perhaps evidence of degradation from long ago.

Homeswest Bushland is in similar condition to Lot 50, and characterised by many dwarf sheoaks (*Allocasuarina humilis*). There is a large cleared area (see map), with weed invasion encroaching into the bush.

Reserve 40336 Bushland is fragmented and subject to weed invasion, especially from the grassed areas, including the Water Authority easement alongside the Channel 9 fence. Recently, large machinery has knocked down a banksia tree and disturbed soil. Also, small jarrah saplings have been slashed and there has been plantings of trees not local to the area.

It is not known when there was last a fire in any of the blocks, though it is apparent a number of years has passed since a burn.

### 4. HISTORY

The land was zoned under the City of Stirling Bylaws for media use in June 1960. Since then three media establishments have been built. Channel 7 lost part of its land (Lot 50) during the Sease/Holmes a Court years in an asset deal. Lot 50 has undergone a number of ownership changes, during which various unsuccessful rezoning proposals (for residential development) have gone before Council. Lot 50 is now in the hands of receivers.

### 5. STATEMENT OF SIGNIFICANCE

- |   |   |
|---|---|
| 0 presence of endangered species, communities | # 6 recreational importance                       |
| # 1 scientific importance                     | # 7 diversity of species, communities             |
| # 2 educational importance                    | # 8 "naturalness"                                 |
| # 3 social importance                         | # 9 rarity  |
| # 4 aesthetic importance                      | # 10 fragility                                    |
| # 5 historic importance                       | # 11 position in an ecological or geographic unit |

photos continued

- 12) WAWA easement along north side POS reserve - K Tullis.
- 13) *Hypocalymnia robustum* in flower and jewel beetle - K Tullis.
- 14) *Allocasuarina humilis* (Homeswest Bushland) - K Tullis.
- 15-16) The historic limestone road.

Attachments

SPECIES LISTS

I. *Flora list by David Pike 1994.*

Additions to native flora list

Asteraceae	<i>Waitzia suaveolens</i>	Fragrant Waitzia
Droseraceae	<i>Drosera sp</i>	Pygmy sundew

Type of Assessment: Natural landscape, with cultural landscape elements.

Date assessed: June - August 1994.

10. LOCATION MAP  
See attached.

National Trust Office use only

The 9 ha of land at Lot 50 is situated on a high Karrakatta sandune (Churchward & McArthur, 1980) which features a flat top and a south-east facing slope. The vegetation is typically a woodland of *Banksia attenuata* and *B. menziesii* (Hedde, et al. 1980). The area is adjacent to small patches of remnant vegetation to the west (held by Channel Seven and the Education Ministry) and to the south-east (held by Channel 9).

Many of the remnant indigenous plant species have been identified (Pike, 1994), so the aim of this report was to assess the quality of the vegetation and map plant communities.

## Methods

Four transects were investigated in late May 1996. Sixteen sites were assessed along these transects and the location of these is shown in Figure 1. At each site an area of approximately 15m radius was assessed for the relative abundance of plant species. Abundance was coded according to :

- 1 - scarce;
- 2 - several individuals;
- 3 - 5 to 14% cover;
- 4 - 15 to 30% cover;
- 5 - >30% cover.

## Results and Discussion

The distributions of undisturbed woodland, disturbed areas and adjacent cultivated areas are shown in Figure 1. The blank areas between the vegetated areas within the boundary of Lot 50 are firebreaks or sandtracks, with the exception of the old limestone road which describes a line from TV stations Channel 7 to Channel 10.

The relative abundances of the plant species are listed in Table 1.

The whole area essentially comprises one vegetation type or community. It is Woodland (overstorey mean height 8m, range approx. 5 to 15m and cover about 25 %). The dominant species are *Banksia attenuata*, *B. menziesii*, and *Eucalyptus marginata* with occasional *Allocasuarina fraseriana* and *Nuytsia floribunda*. The spread of these species and the understorey species is evident in Table 1. No distinct community boundaries were encountered.

The vegetation type corresponds to community type 28 of Gibson et al. (1994)

which is not recognised as a threatened community type.

The quality of the vegetation at Lot 50 is high. Community type 28 typically has 55.2 species per 10x10m plot of which 8 are usually weed species (Gibson et al 1994). By contrast at Lot 50 there were fewer weed species (only about 4 species per, much larger, plot). Through most of the undisturbed bushland weeds were a minor component with 4 species in the genera *Briza*, *Gladiolus*, *Ursinea* and *Hypocheris* being present throughout at low densities. The cover of native understorey was high (75 to 80% or more) and probably excluded weeds. Most of the tracks had few weeds and featured native vegetation in various stages of regeneration. The exceptions, which had large weed populations, were the north-east verge of Joy St. and the old limestone road between the entrances to Channel 7 and Channel 10. Along these two thoroughfares cultivation and the dumping of garden refuse had lead to weed invasion. The main populations of weeds are discrete and could be suppressed by removing refuse and selective herbicide use.

Apart from garden refuse there were only minor bits of rubbish, such as car parts and house material scattered through the block. Several rabbit warrens were present. The warrens did not feature weed species and there was limited evidence of native plants having been severely grazed. The kangaroos which live on the lot were observed to feed on the grass verge next to Joy St.

Although the area can be called one vegetation type it is not uniform. There is patchiness in the distribution of understorey species, for instance *Petrophile macrostachya*, *Calothamnus sanguineus*, *C. quadrifidus* and *Allocasuarina humilis* (Table 1). On the south-east slope there appeared to be more orchids (eg *Burnettia nigricans* & *Eriochilus dilatatus ssp. dilatatus*), triggerplants (*Stylidium* species) and sundews (*Drosera* species) (Table 1 & Figure 1). In the extreme east there was a concentration of species such as *Astroloma macrocalyx*, *Calytrix fraseri*, *Hybanthus calycinus*, *Olearia elaeophila* and *Synaphea spinulosa* (Table 1 & Figure 1). This may correspond to a damper area at the foot of the slope which coincides with a soil change from Bassendean to Karrakatta sand. The implication of this finding is that subdividing the remaining vegetation will leave a portion of the same vegetation type but is unlikely to leave the whole of the flora of Lot 50 intact.

Overstorey species were generally in good condition with little of the senescence that typifies King's Park. Some of the larger *Eucalyptus marginata* had evidence of old crown death. Otherwise isolated dead *Banksia attenuata* trees were present at sites 11, 13 & 15. Several *B. menziesii* had died at site 7 indicating that there may be a pathogen at the vicinity of the track.

The understorey also appeared to be in good condition. The understorey was not senescent or overly congested with native plant litter, neither was there evidence of too frequent burning of the vegetation, such as stunted resprouts, blackened stems and open surfaces.

The species list presented is not complete and it is very likely that several species remain to be found. A specific flora survey in spring should locate many species when they are flowering. Many sedge and herbaceous species are difficult to find when they have died back or are not flowering.

### References

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Figure 1 : VEGETATION MAP OF LOT 50

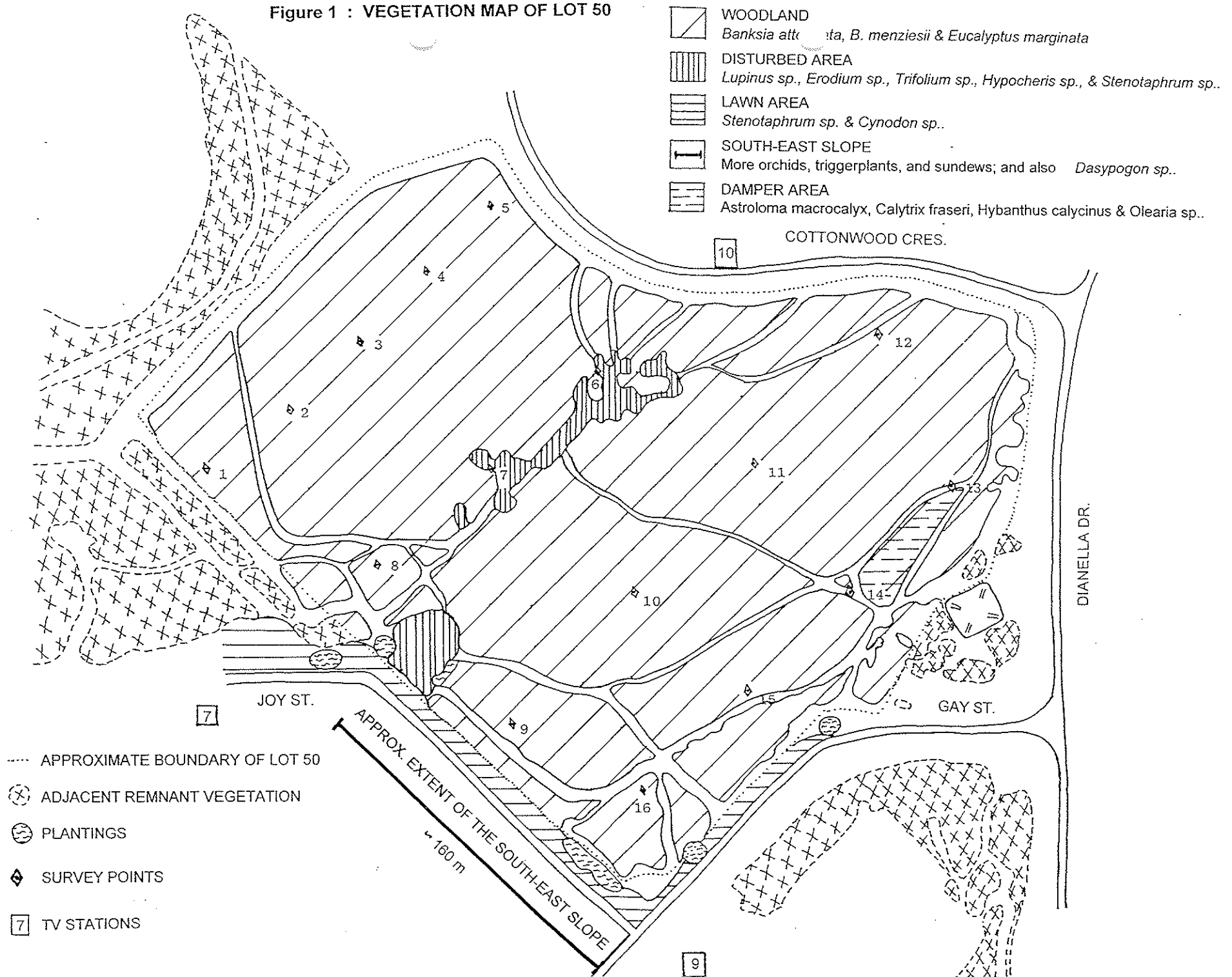


TABLE 1 : Species abundance at survey sites at lot 50.

	SITES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>TREE LAYER</b>																
<i>Allocasuarina fraseriana</i>	1		1		1	1		2	2	1	1	1		2	1	1
<i>Banksia attenuata</i>	3	1	2	3	1		2	4	3	2	3	2	2	2	3	3
<i>Banksia ilicifolia</i>						1										
<i>Banksia menziesii</i>	3	3	3	1	3		4	3	3	3	2	3	3	3	2	2
<i>Eucalyptus marginata</i>	2		3	3	2	2	3	3	3	3	3	3	2	2	3	3
<i>Nyctia floribunda</i>	1	1				1	1	1	2		1			2	1	
<b>SHRUB LAYER</b>																
<i>Hakea ruscifolia</i>								2				2				1
<i>Jacksonia densiflora</i>	1						1	1	3	2			2	2	2	
<i>Jacksonia furcellata</i>				4			1	1		1			1			
<i>Jacksonia sternbergiana</i>	2		1	1	1	3	1	2	3	2	1	2	2	1	2	3
<i>Macrozamia riedlei</i>			1		1				1	1	1	1		1		
<i>Xanthorrhoea preissii</i>	2	2	4	4	5	4	3	3	2	3	3	4	3	3	3	3
<i>Acacia saligna</i> @							1	1								
<i>Chamelaucium uncinatum</i> @							1									
<i>Melaleuca nesophylla</i> @									1							
<b>UNDERSTOREY LAYER</b>																
<i>Acacia pulchella</i>	1	2	3							1						
<i>Acacia sessilis</i>									2				1			2
<i>Acacia wildenowiana</i>			1	2	1		1	1		1		1	1	1	1	1
<i>Alexgeorgea nitens</i>									2		1			2	1	
<i>Allocasuarina humilis</i>		1				2		2		1	2			1	1	
<i>Amphipogon turbinatus</i>						1		1	1				2			1
<i>Anigozanthos humilus</i>						2				2		1	1	1	1	1
<i>Anigozanthos manglesii</i>									3							
<i>Astroloma macrocalyx</i>													1			
<i>Astroloma pallidum</i>						1				1			2			1
<i>Bossiaea eriocarpa</i>	1	2	2	3	3		2	2			1	3	1	1	1	1
<i>Bossiaea ornata</i>	1															
<i>Burchardia umbellata</i>	2	1	2	2				2					1	2		2
<i>Burnettia nigricans</i>													2			
<i>Burtonia conferta</i>													2			
? <i>Caesia parviflora</i>	3	2		2	2	2	2	2	3	2	2	3	2	1	3	3
<i>Calectasia cyanea</i>			1		2	2	2			1	2		1	2		2
<i>Calothamnus quadrifidus</i>													1			
<i>Calothamnus sanguineus</i>												1				
<i>Calytrix flavescens</i>	1		2		2	4	3	3	3	1		1		2	3	3
<i>Calytrix fraseri</i>									1				2			
<i>Cassytha ?racemosa</i>		2														
? <i>Chamaescilla corymbosa</i>								1		1	1		1		1	1
<i>Conostephium pendulum</i>		1			1		1							1		
<i>Conostephium preissii</i>	2	1	2	1	2	1	2	2	2	2	2	2	1	2	2	1
<i>Conostylis aculeata</i>	2				1		2	3				2	1	1		1
<i>Conostylis setigera</i>	1	2		1					2			2	2	1	2	
<i>Corynotheca micrantha</i>									1				2			

\* - weeds; @ - cultivated; ? - vegetative identification

TABLE 1 : Species abundance at survey sites at lot 50.

	SITES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>Cyathochaeta avenacea</i>		2								1				1		
<i>Dampiera linearis</i>	1	1		2	2		2	2		2	2	2	2	2	2	1
<i>Danthonia occidentalis</i>									2							
<i>Dasyogon bromeliifolius</i>					1					2	1	2	2	2	2	
? <i>Daucus glochidiatus</i>								1								
<i>Daviesia nudiflora</i>	2	1	1	2	1	2	1	1	1	2	2	2	1	1	2	1
<i>Daviesia triflora</i>	2		1	2	3	2	2	2	2	2		1	2	2	2	2
<i>Drosera ?pallida</i>				1			1			2	2	2				
<i>Drosera aff. pulchella</i>														1		
<i>Drosera erythrorhiza</i>			2	3		3				2	1	1	2	1		1
<i>Dryandra nivea</i>	2		3	2						2				2	1	2
<i>Eremaea asterocarpa</i>															2	
<i>Eremaea pauciflora</i>	3	3	3	1		1	3	3	3	1		1		3		3
<i>Eriochilus dilatatus ssp. dilata</i>													2	1		
<i>Eriostemon spicatus</i>																
<i>Gompholobium tomentosum</i>	3	3	3	3	3	2		3		2	3	2	2	2	3	3
? <i>Gonocarpus pithyoides</i>															1	
<i>Haemadorum laxum</i>	1	2	2	1	1	2		2	2	2	2	2	2	2	2	2
<i>Haemadorum spicatum</i>													1			
<i>Hardenbergia comptoniana</i>					1					1						
<i>Hemiandra pungens</i>	1	1		1									1			1
<i>Hibbertia huegelii</i>									1		1	1				
<i>Hibbertia hypericoides</i>	2		1	2	1	1	2	3	3	3	2	2		2	2	2
<i>Hovea trisperma</i>							1	1					1	1	1	
<i>Hybanthus calycinus</i>													1			
<i>Hypocalymma robustum</i>	2	3	3	3	3		3	3	3	3	3	3	3	3	2	3
<i>Hypolaena exsulca</i>		1		2	2		3	3		2	2	2	2	3		2
<i>Isotropis cuneifolia</i>						1						1				
<i>Kennedia prostrata</i>			1													
? <i>Lagenifera huegelii</i>											1					
<i>Laxmania ramosa</i>													2			
<i>Lechenaultia floribunda</i>	2		3										2	2	3	
<i>Lepidosperma angustatum</i>														1		
<i>Lepidosperma leptostachyum</i>	2							1	2		2	1	2	1	1	1
<i>Leucopogon conostephioides</i>	1															
<i>Leucopogon ?racemosus</i>		3														
<i>Leucopogon propinquus</i>			1	2												
<i>Lomandra hermaphrodita</i>	1	1	1		1				1			2	1			1
<i>Lomandra preissii</i>	1							1	1	1		1			1	1
<i>Loxocarya fasciculata</i>	2	1	3	3	3	1	2	3	2	3	3	3	2	2	2	2
<i>Loxocarya flexuosa</i>	3	2	3	3	3	3	4		2	2	2	3	2	3	3	2
<i>Lyginia barbata</i>	1	3	3	3	2	3		3	3		1	2	2	2	2	1
<i>Lysinema ciliatum</i>			1						3							
<i>Melaleuca trichophylla</i>	2														2	
<i>Mesomelaena stygia</i>	3	2	2	2	2	2	2	2	2	2		2				1
<i>Mesomelaena ?pseudostygia</i>	3	2	3	2	3	3	3	3	3	2	3	3	3	1	2	2

\* - weeds; @ - cultivated; ? - vegetative identification

TABLE 1 : Species abundance at survey sites at lot 50.

	SITES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>Mitrasacme paradoxa</i>																1
<i>Neurachne alopecuroidea</i>						3			1	2		3	3			
<i>Olearia elaeophila</i>													1			
<i>Nemcia capitata</i>	1	1	1	2	1	1	1	2	2		1	2	2	2	1	
<i>Patersonia occidentalis</i>	2	3	3	2	1		3	3	3	3	2	2	3	3	1	2
? <i>Persoonia saccata</i>	2								1					1	1	
<i>Petrophile linearis</i>	2	1	3	2	1	2	2	3	2	2	2	2	2	2	3	2
<i>Petrophile macrostachya</i>								1	1				1			1
<i>Phlebocarya ciliata</i>	1		3	2	3	2	3	3	3	3	2	4	2	3	3	2
<i>Pimelea rosea</i>								1			1					
<i>Pimelea sulphurea</i>	1								1				1	1	1	1
<i>Podotheca angustifolia</i>						3										
<i>Scaevola paludosa</i>	1	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2
<i>Scholtzia involucreta</i>	1	1	2		1			2	2		1	1	2	1	1	1
<i>Stipa ?semibarbata</i>			1				1	2								1
<i>Stirlingia latifolia</i>	3	3	3	4	4	4	3	3	3	3	3	2	2	3	2	2
<i>Styliidium ?carnosum</i>											1	1				
<i>Styliidium piliferum</i>									2	1			1		1	
<i>Styliidium repens</i>		1										1				
<i>Synaphea spinulosa</i>													1			1
<i>Tetragia octandra</i>			1	3	2	3	3	3	3	3	3	3	3	2	2	3
<i>Tetragia hirsuta</i>																1
<i>Thysanotus sparteus</i>													1		2	2
<i>Trachymene ?pilosa</i>	2			2							1					
<i>Tricoryne elatior</i>															1	1
<i>Xanthosia huegelii</i>							1									

\* - weeds; @ - cultivated; ? - vegetative identification

TABLE 1 : Species abundance at survey sites at lot 50.

WEED SPECIES	SITES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>Arctotheca calendula</i> *							1									
<i>Avena fatua</i> *									1							
<i>Briza maxima</i> *	1		1		2	2	2	2	2	2	1	2		1	2	2
<i>Briza minima</i> *		1														
<i>Conyza bonariensis</i> *																
<i>Cynodon dactylon</i> *								5								
<i>Ehrharta calycina</i> *	1	1				1	1		1						1	2
<i>Ehrharta ?longiflora</i> *									1							
? <i>Erodium botrys</i> *						3	3									
? <i>Freesia affin. leichtlinii</i> *							1									
<i>Gladiolus ?angustus</i> *	1	2	1	2	2	2	2	2	3	2	2	2	2	2	2	2
<i>Heliophila pusilla</i> *	1								1							
<i>Hypochaeris glabra</i> *			1	1	1	2	2		2			2		1		2
<i>Lupinus ?consentinii</i> *						5		4								
<i>Orobanche minor</i> *													1			
<i>Pelargonium capitatum</i> *									1							
<i>Poaceae species</i> *									1							
? <i>Raphanus raphanistrum</i> *									2							
<i>Romulea rosea</i> *															1	
<i>Sonchus oleraceus</i> *									1							
<i>Stenotaphrum secundatum</i> *							5									
<i>Trifolium ?arvense</i> *						3	1									
<i>Ursinia anthemoides</i> *	1	1		2		2	2		2	1	2	2		2		

\* - weeds; @ - cultivated; ? - vegetative identification



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