

DOGHILL ROAD BUSHLAND, BALDIVIS

Boundary Definition: management/bushland taken to cadastre boundary

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 369

Area (ha): bushland 58.8

Map no. 71, 76

Map sheet series ref. no. 2033-II NW

Other Names: not known

Local Authorities (Suburb): City of Rockingham (Baldivis)

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

Bassendean Sands over Guildford Formation (Qpb/Qpa: S10)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Dardanup Complex

Floristic Community Types: *not sampled, type inferred

Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

*28 Spearwood *Banksia attenuata* or *B. attenuata* – *Eucalyptus* woodlands

WETLANDS

No wetlands mapped

THREATENED ECOLOGICAL COMMUNITIES

Not determined

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated uplands

Vegetation and Flora: limited survey (Connell 1995, DEP 1998, DEP 1999)

Structural Units

Uplands: *Banksia attenuata*, *B. menziesii* and *Allocasuarina fraseriana* Low Woodland; Scattered *Eucalyptus marginata* and/or *Eucalyptus gomphocephala* over *Banksia* species Low Woodland

Scattered Native Plants: not assessed

Vegetation Condition: Very Good (DEP 1999)

Total Flora: >69 native taxa (DEP 1999) (estimated >50% expected flora)

Significant Flora: none recorded

Fauna: not known

Linkage: adjacent bushland to the north, south, east and west

Other Special Attributes: mapped within the boundaries of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities

Recommendation: Rural Complementary Mechanism (see Table 3, Volume 1).

DOGHILL ROAD BUSHLAND, BALDIVIS

Boundary Definition: management/bushland taken to cadastre boundary

SECTION 1: CADASTRAL INFORMATION

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

Bushplan Site no. 369 **Map no.** 94 **Map sheet series ref. no.** 2033-II NW

Other Names: not known

Area (ha): total 59.1; bushland 58.8

Local Authorities (Suburb)

Zoning

City of Rockingham (Baldivis)

MRS: Rural

TPS: Rural, Local Roads

Ownership Categories

Lot/Location/Reserve numbers (Purpose),

Private (including commercial organisation)

Street name

1, 2, 300, 301, 302 Saint Albans Rd; 8, 17, 20, 1101, 1104 Doghill Rd

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

Bassendean Sands over Guildford Formation (Qpb/Qpa: S10)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Dardanup Complex

Floristic Community Types: not sampled, types unable to be inferred

WETLANDS

No wetlands mapped

THREATENED ECOLOGICAL COMMUNITIES

Not determined

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated uplands

Vegetation and Flora: aerial photography interpretation (Connell 1995, DEP 1998)

Structural Units

Uplands: Scattered *Eucalyptus marginata* over *Banksia* species Low Woodland

Scattered Native Plants: not assessed

Vegetation Condition: Good (Connell 1995)

Total Flora: not known

Significant Flora: none recorded

Fauna: no known information

Linkage: adjacent bushland to the north, south, east and west

Other Special Attributes: mapped within the boundaries of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities

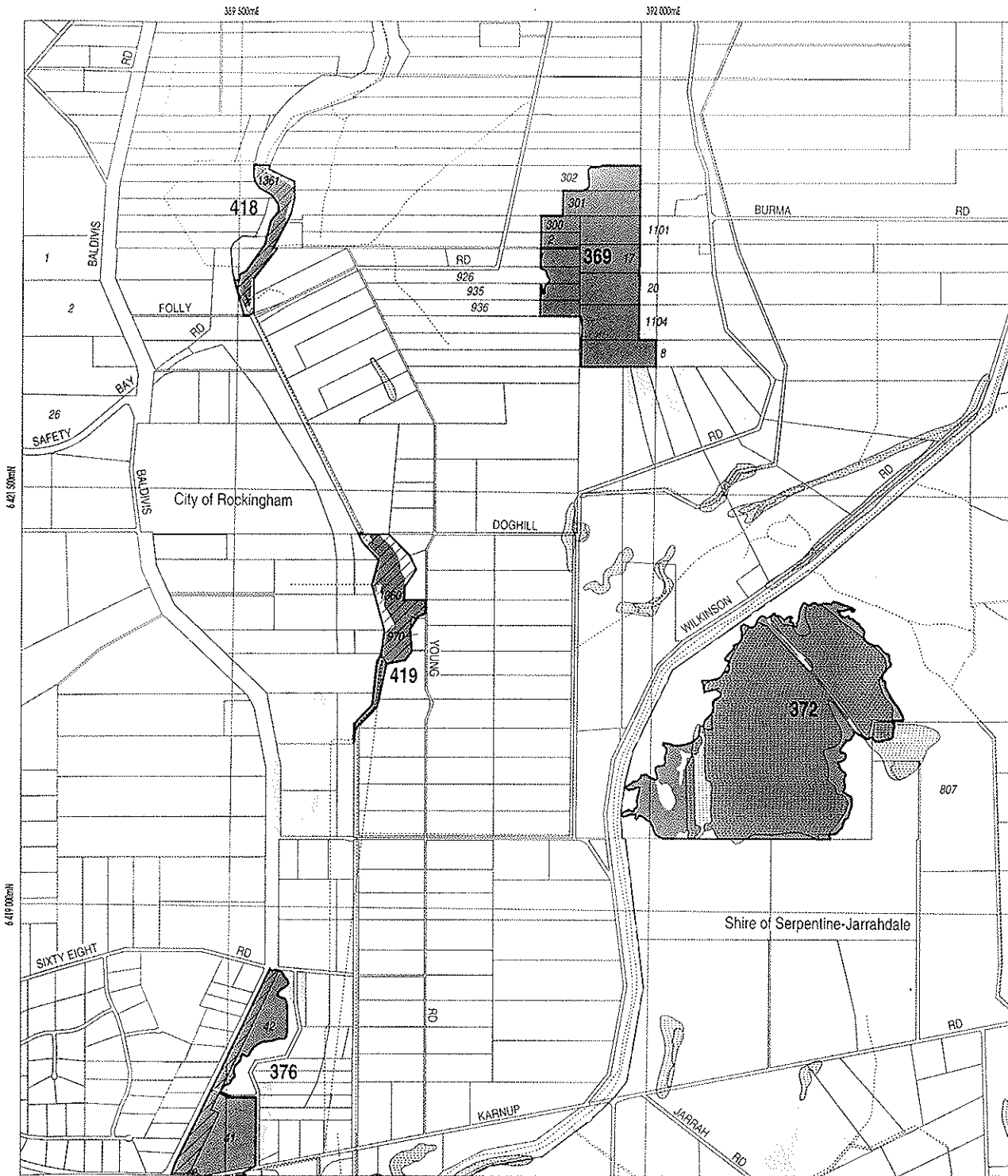
Opportunities and/or Constraints

Opportunities: Bushplan Site/part Bushplan Site subject to Peel-Harvey Estuary EPP/SPP

Constraints: private land

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).

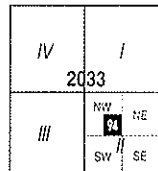




LEGEND

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

2033 - II NW



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

PERTH'S BUSHPLAN MAP INDEX

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91	92
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95	96
97	98
99	100
101	102
103	104
105	106



SCALE
0 500 1000
Metres

Produced by Project Mapping Section
Land Information Branch, Ministry for
Planning, Perth W.A. November 1998
rtw-map17//environ/bushplan/bushv2_94.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

WILD 1574 UAG-
No 13213 152 67

3416





panAlPama 1999 central

↑ BS 369
Doghill Rd
Bushland
Baldvís
1998



369

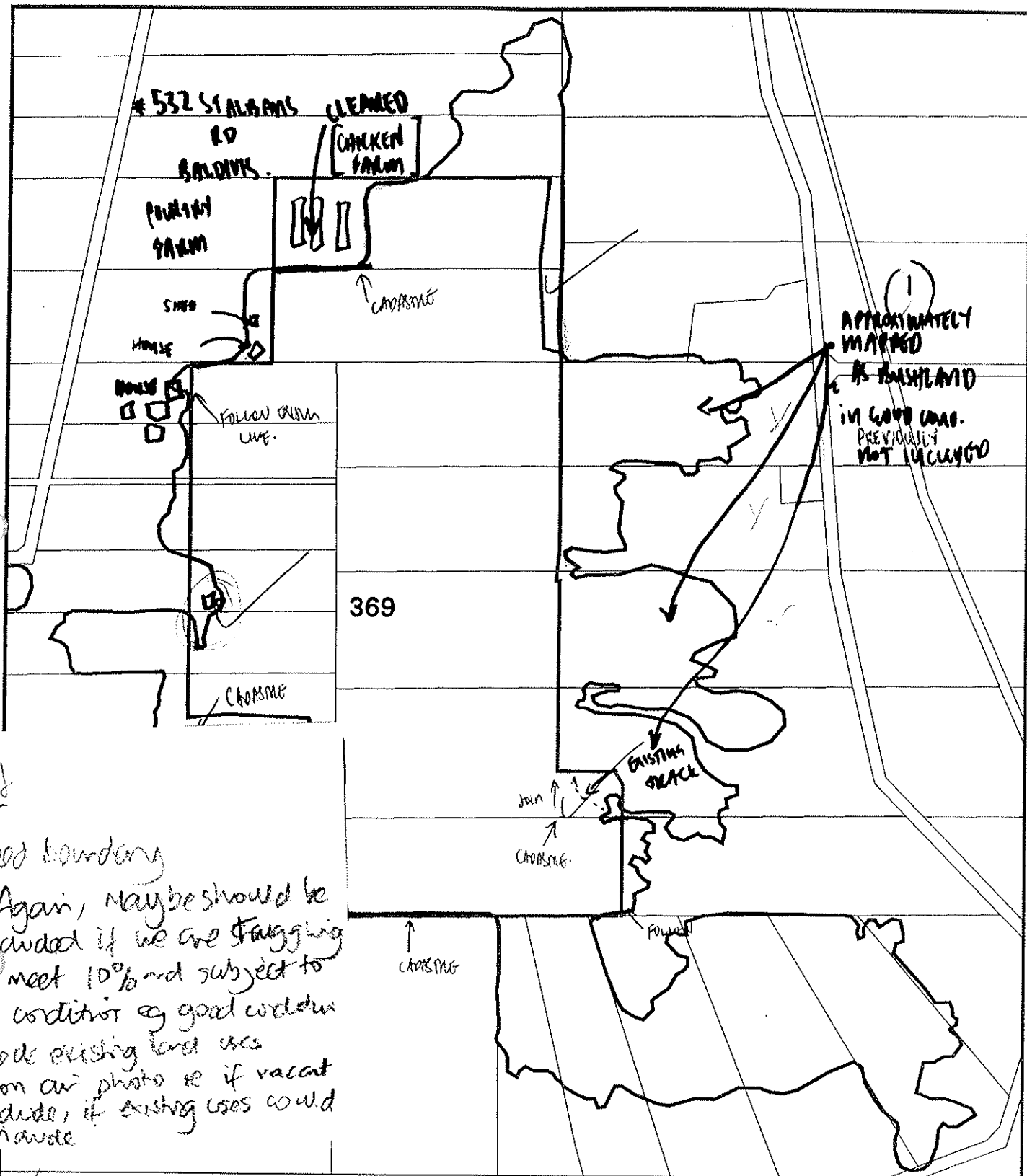
BUSHPLAN SITES CORRECTED



WESTERN
AUSTRALIAN
PLANNING
COMMISSION



B BK 28/10/98



Cult

Agreed boundary

(1) Again, maybe should be included if we are struggling to meet 10% and subject to veg condition of good condition. Check existing land uses from air photo re if vacant exclude, if existing uses could invade.

CSK 23/9

bp site 369

- 10% selection site, but boundary allows for sections of land to remain
- no field inspection, too far from roads (need permission)

MFP INTERNAL USE ONLY
 Prepared By: Andrea Zappacosta
 Prepared For:
 Map Id: plot980603_1
 Date: 03 Jun 98
 Scale 1:8859

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

-UNABLE TO ASCERTAIN ORIGINAL BASIS OF SITE BOUNDARY DETERMINATION
 -HAVE ATTEMPTED TO DELINEATE CORE AREA FOR CONSERVATION PURPOSE, WITH REFERENCE TO EXISTING SITE BOUNDARY

15-SEP-98

MINISTRY FOR PLANNING
LAND DETAILS REPORT FROM DOLA

FIN : 366180

PI : 1D063726 302 1VRP
Validated by PADC And Reconciled with Tenure Dataset
Survey Lot : Diagram Survey No - 063726 Lot No - 302

Address(es): (House) 532 Saint Albans Rd Baldivis 6171

Legal Area : 10.97745 Hectares
Calc Area : 10.98021 Hectares

VGO Map Reference C/T
PEEL 1:10000 3.5 BG33 1649/246

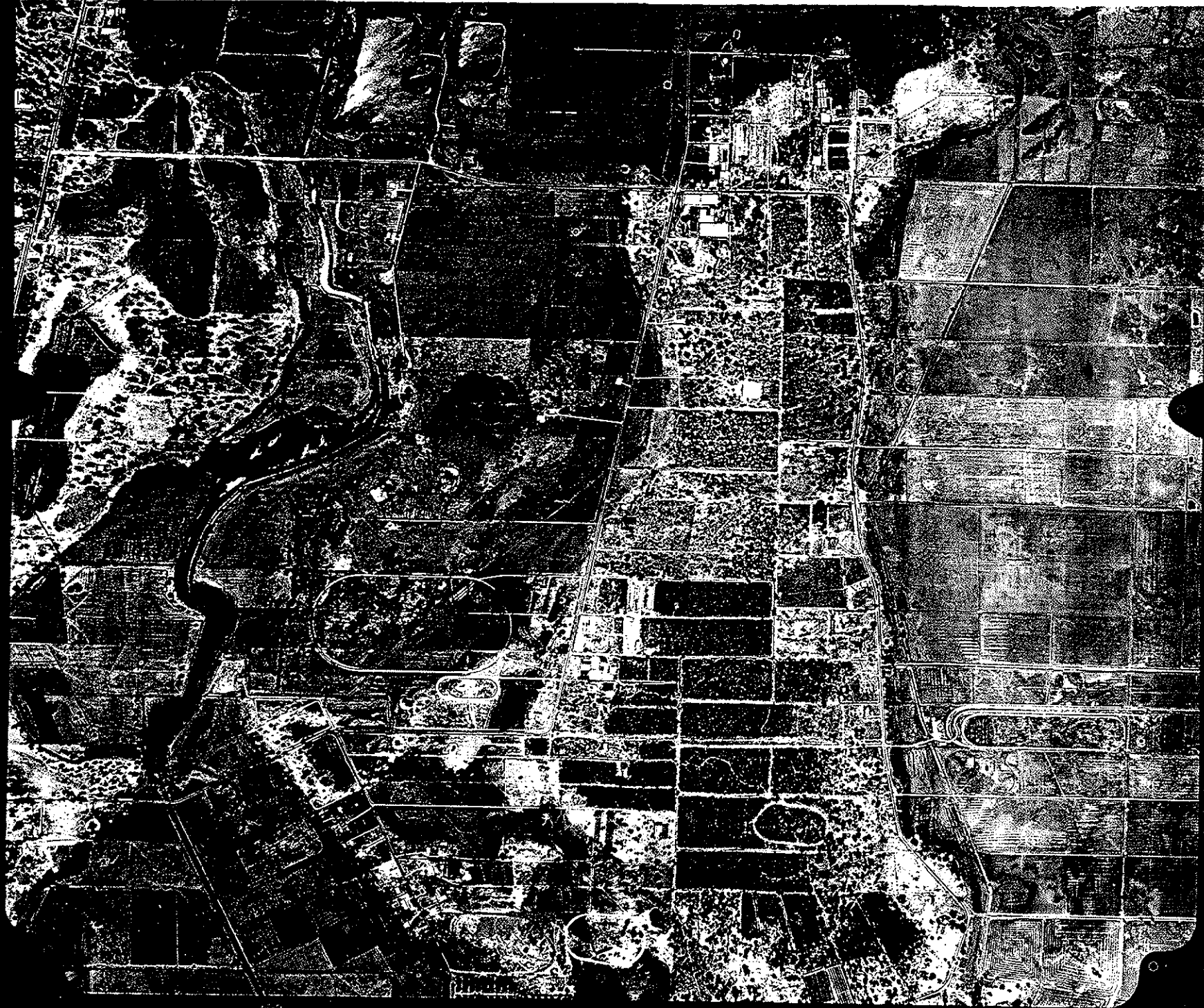
Owners	C/T	GPR
Sup. One Chicken Holdings Pty Ltd	1649/246	Commercial Org
White, Colleen Joan	1649/246	Private
White, John Robert	1649/246	Private

Consideration : \$57800 Chattels : \$0 Date : 86/10/31 C/T : 1649/246
\$225000 Chattels : \$0 95/01/13 C/T : 1649/246

C/T : 1649/246 Sold By : Hammer Investments Pty Ltd
1649/246 Mahony Lynsted Holdings Pty Ltd
1649/246 Seetsen Holdings Pty Ltd

=== E N D O F R E P O R T ===

=====



5056

WA 316

METRO REGIONAL AREA & EXT. RUN

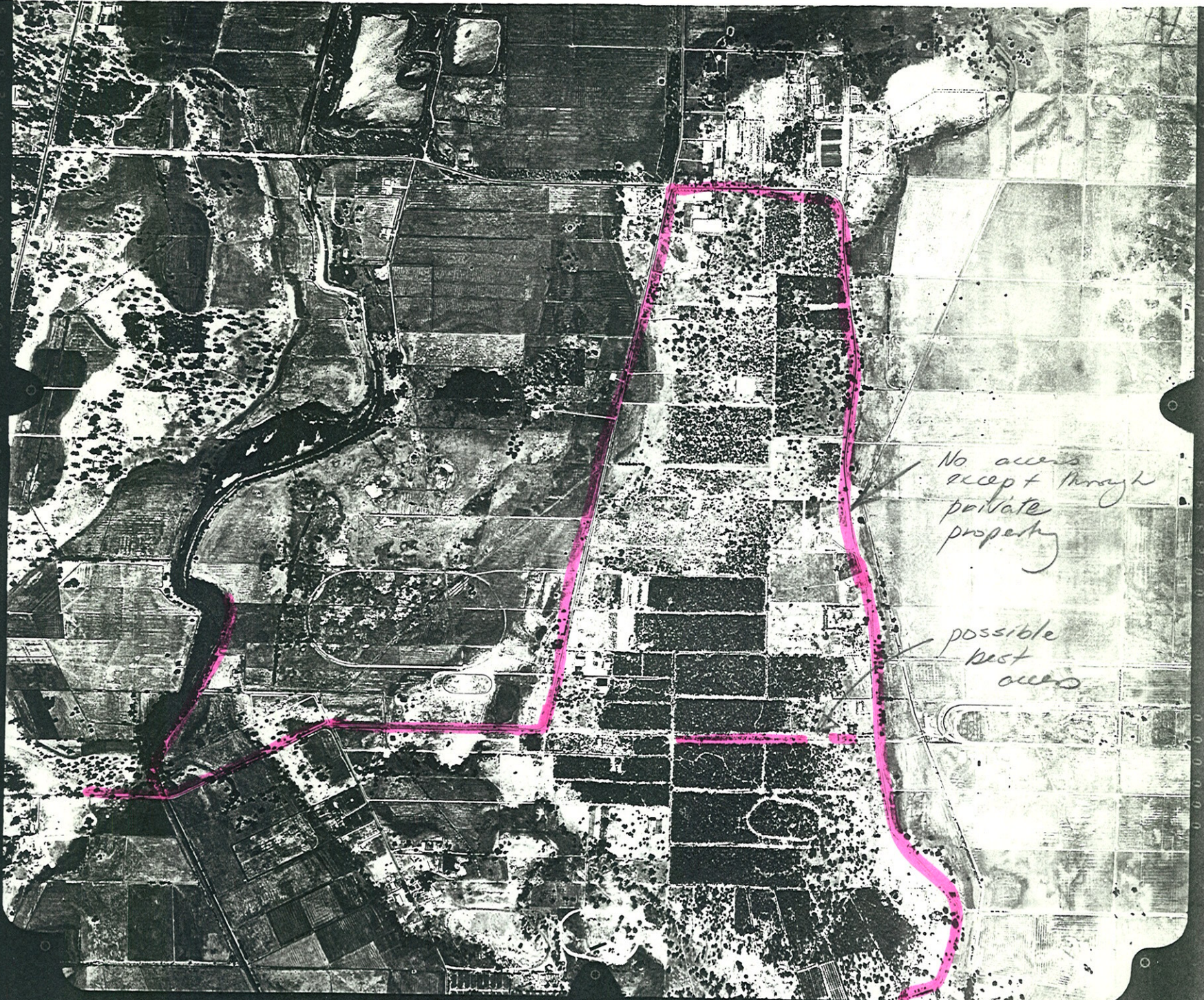
(5001-5087)

1:20000

11-DEC-92

920676

9/1/98



No access
except through
private
property

possible
best
access

Too difficult to see
highland without
access permission.



BS369

41

PB172

CITY OF ROCKINGHAM

Civic Boulevard, Rockingham
Western Australia

OUR REF: TP11-2-44 PM.mw
YOUR REF:

ENQUIRIES TO: Mr Monks

23rd April 1999

Manager
Environmental Planning Branch
Ministry for Planning
469 Wellington Street
PERTH WA 6000

MINISTRY FOR
PLANNING
27 APR 1999
805-2-1-32 PH12
FILE

Dear Sir

Re: Submission on the Draft Perth's Bushplan

I refer to your letter dated the 27th November 1998 inviting comment on the draft Perth's Bushplan. The report and plans were presented to Council at its ordinary Meeting held on the 23rd March 1999, where it was resolved to submit the following comments, which are divided into four sections:-

1. Principles and Recommendations.
2. Comments on specific sites nominated in the City of Rockingham.
3. General Comments.
4. Implementation.

1. PRINCIPLES AND RECOMMENDATIONS

The retention of regionally and locally significant bushland is an important measure that has the support of the City of Rockingham, and the draft Perth Bushplan provides important information and recommendations to achieve this objective.

The methodology used to establish which sites are of regional significance is clear, once the reporting structure of the various volumes of the documents is understood.

Council has attended a number of briefing sessions organised by the Ministry for Planning and WAMA and these sessions have played a very important role in understanding both the implications of the recommendations of Perth Bushplan, and the views of the various parties that are affected by the Report.

SUBMISSION NO. 501

OFFICE HOURS
MONDAY TO FRIDAY
8.30AM to 4.30PM

ALL COMMUNICATIONS TO BE
ADDRESSED TO THE CHIEF EXECUTIVE OFFICER
PO BOX 2142 ROCKINGHAM DC 6967

TELEPHONE: 9528 0333
FAX: 9592 1705

(xiii) Bushplan Site No. 367 - Penguin, Seal, Bird and Gull Islands and Shag Rock

These sites are part of the Shoalwater Islands Marine Park and are reserved in the MRS as 'Parks and Recreation'. The sites are subject to a management strategy prepared by CALM which is responsible for protection and ongoing management.

(xiv) Bushplan Site No. [redacted] - Doghill Road Bushland, Baldivis

This site contains significant remnant vegetation and is wholly contained within private ownership. It is appropriate that Council, the Bushplan Co-ordinator and the Ministry for Planning liaise with the landowners on a negotiated planning solution that enables the retention of the significant vegetation whilst catering for the aspirations of the affected landowners.

Council's Rural Land Strategy permits subdivision of lots in the precinct within which these lots are located, to a minimum size of 2ha, however, it is a usual part of any planning process to identify physical features worthy of preservation and this should also occur in this instance.

It should be noted that Council has received copies of submissions from two of the affected landowners. Council supports the need for all the above parties to meet to determine the future development potential of the various landholdings, after taking into account the significant on-site vegetation.

(xv) Bushplan Site No. [redacted] - Port Kennedy

The Port Kennedy area is reserved in the MRS as 'Parks and Recreation' and is an 'A' Class Reserve for Scientific Purposes. The site is also part of the Rockingham Lakes Regional Park, for which CALM is currently preparing a Management Plan.

(xvi) Bushplan Site No. [redacted] - Anstey Swamp, Karnup

Anstey Swamp is currently reserved 'Parks and Recreation' in the MRS. The swamp is also an EPP and Conservation status sumpland and is appropriately nominated as a Bushplan site.

(xvii) Bushplan Site No. [redacted] - Folly Pool, Baldivis

Folly Pool is vested with the Water Corporation and as such, management responsibilities should primarily rest with this authority, in consultation with other relevant authorities, including the City. The site is a nominated EPP and Resource Enhancement status sumpland.

Lots 300, 301 and 302 Bushplan Site 369 - Field Inspection 30/6/99

Background

This Bushplan Site was not inspected before the release of Bushplan as the bushland is in the back of a series of lots (?13 lots). Aerial photography indicates that the bushland is in Very Good Condition (good canopy cover) and as the bushland is mapped in the Dardanup Complex (11% proposed to be protected), a unit of the eastern side of the Plain, and there are few bushland patches in the area it was included in Bushplan.

Vegetation

On inspection of Lots 300, 301 and 302 (considered to be typical of the Site) the bushland was found to be Low Woodland dominated by combinations of *Banksia attenuata*, *B. menziesii* and *Allocasuarina fraseriana*. Areas of this woodland contain scattered *Eucalyptus marginata* and/or *Eucalyptus gomphocephala*. This vegetation is typical of the Karrakatta Complex - Central and South and floristic community type 28, NOT the Dardanup Complex.

Generally the bushland is in Very Good condition having been impacted by past grazing. However, this is the best area of this vegetation in the area. Veldt grass was evident along firebreaks and in patches under Tuart. Over sixty native taxa were recorded in the brief inspection.

Discussion

Bushland is suitable for inclusion in Bushplan according to its natural values. Floristic community type 28 is at its most southern extent in this area (Leda is most southern sampled area for this floristic community type, but also inferred for BS376). The condition of this bushland is comparable with best in Leda. This bushland type does not occur in Bushplan Site 356 (Tamworth Hill section as suggested by owners).

Lots 300, 301 and 302 **Bushplan Site**
369 - Field Inspection 30/6/99.

Background

This Bushplan Site was not inspected before the release of Bushplan as the bushland is in back of a series of lots (13 lots). Aerial photography indicates that the bushland is in Very Good Condition (good canopy cover) and as the bushland is mapped in the Dardarup Complex (11% proposed to be protected), a unit of the eastern side of the Plain, and there are few bushland patches in the area it was included in Bushplan.

Vegetation

On inspection of Lots 300, 301 and 302 (considered to be typical of the site) the bushland was found to be low woodland dominated by combinations of Banksia attenuata, B. menziesii and Allocasuarina traseriana. Areas of this woodland contain scattered Eucalyptus marginata and/or Eucalyptus gomphocephala. This vegetation is typical of the Karrekattu Complex - Central and South and floristic community type 28, not the Dardarup Complex. Generally the bushland is in Very Good Condition having been impacted by past grazing. However this is the best area

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Over sixty native taxa were recorded in the brief inspection.

Discussion

Bushland is suitable for inclusion in Bushplan according to its natural values.

Floristic community type 28 is at its most southern extent in this area

(Leda is most southern sampled area for this tax, but also inferred for BS 376)

The condition of this bushland is comparable with best in Leda.

This bushland type does not occur in bushplan Site 356 (Tomworth Hill section as suggested by owners.

BUSHLAND AREA LS 369 SITES YES/NO
 DATE 30/6/99 RECORDERS CK

Observations edge transects

Geographic Location Latitude S Longitude E
 Reference Map

Photograph Photographer's Name Photo No

Transect of landscape units (draw in transect incorporating features listed and any other relevant unit)

dunes
 dry/wet flats
 sumplands
 uplands
 type



Soil - surface grey sub -soil
 Exposed rock type limestone % area at depth

FLORA/VEGETATION (list dominant and significant plants below, see over for vege association descriptions)

Eucalypts	<i>E. calophylla</i>	<i>E. wandoo</i>	<u><i>E. marginata</i></u>	<i>E. tottiana</i>	<i>E. rudis</i>
	<i>E. decipiens</i>	<i>E. drummondii</i>	<i>E. haematoxylon</i>	<i>E. lanepolei</i>	<u><i>E. gomphocephala</i></u>
	<i>E. accedens</i>	<i>E. patens</i>	<i>E. laeliae</i>	<i>E. megacarpa</i>	
Sheoaks	<u><i>Allocasuarina fraserana</i></u>		<i>Casuarina obesa</i>		
Banksia	<u><i>B. attenuata</i></u>	<u><i>B. menziesii</i></u>	<i>B. prionotes</i>	<i>B. illicifolia</i>	<i>B. grandis</i> <i>B. littoralis</i>
Melaleuca	<i>M. preissii</i>	<i>M. raphiophylla</i>	<i>M. lanceolata</i>		<i>M. cuticularis</i>
Others	<i>Callitris preissii</i>				
Mallees	Eucalypts	<i>E. argutifolia</i>	<i>E. petrensis</i>	<i>E. decurva</i>	<i>E. foecunda</i> <i>E. latens</i>

SIGNIFICANT SPECIES

None of much importance

(see over for vegetation descriptions)

Vegetation Condition - Keighery 1994 (Trudgen 1993) (show range and indicate predominant class)

- 1 = 'Pristine' (Excellent)
- 2 = Excellent (Very Good)
- 3 = Very Good (Good)
- 4 = Good (Poor)
- 5 = Degraded (Very Poor)
- 6 = Completely Degraded

Specific aspects of disturbance

partial clearing

weeds (list): Oxalis, veldt / roadside 350/300 veldt type

selective removal of species: timber cutting mowing fire grazing dieback %area

fire frequency:

'enrichment plantings' (list)

animal impact: horse foxes rabbits cats dogs goats pigs overgrazing by native mammals

soil movement: mining dumping rubbish dumping roadworks

changes in water regimes: flooding drainage watering nutrient influx

Tracks: fire breaks walk trails off road vehicle use animal tracks

Service corridors: SEC Main Roads Water Authority Telecom

Other

LIFE FORM/HEIGHT CLASS	CANOPY COVER			
	DENSE 70-100%	MID-DENSE 30-70%	SPARSE 10-30%	VERY SPARSE 2-10%
Trees >30m Trees 15-30m Trees 5-15m Trees <5m	Dense Tall Forest Dense Forest Dense Low Forest A Dense Low Forest B	Tall Forest Forest Low Forest A Low Forest B	Tall Woodland Woodland Low Woodland A Low Woodland B	Open Tall Woodland Open Woodland Open Low Woodland A Open Low Woodland B
Mallee tree form Mallee shrub form	Dense Tree Mallee Dense Shrub Mallee	Tree Mallee Shrub Mallee	Open Tree Mallee Open Shrub Mallee	Very Open Tree Mallee Very Open Shrub Mallee
Shrubs >2m Shrubs 1.5-2.0m Shrubs 1.0-1.5m Shrubs 0.5-1.0m Shrubs 0.0-0.5m	Dense Thicket Dense Heath A Dense Heath B Dense Low Heath C Dense Low Heath D	Thicket Heath A Heath B Low Heath C Low Heath D	Scrub Low Scrub A Low Scrub B Dwarf Scrub C Dwarf Scrub D	Open Scrub Open Low Scrub A Open Low Scrub B Open Dwarf Scrub C Open Dwarf Scrub D
Mat plants Hummock Grass Bunch grass >0.5m Bunch grass <0.5m Herbaceous spp.	Dense Mat Plants Dense Hummock Grass Dense Tall Grass Dense Low Grass Dense Herbs	Mat Plants Mid-Dense Hummock Grass Tall Grass Low Grass Herbs	Open Mat Plants Hummock Grass Open Tall Grass Open Low Grass Open Herbs	Very Open Mat Plants Open Hummock Grass Very Open Tall Grass Very Open Low Grass Very Open Herbs
Sedges >0.5m Sedges <0.5m	Dense Tall Sedges Dense Low Sedges	Tall Sedges Low Sedges	Open Tall Sedges Open Low Sedges	Very Open Tall Sedges Very Open Low Sedges
Ferns Mosses, Liverwort	Dense Ferns Dense Mosses	Ferns Mosses	Open Ferns Open Mosses	Very Open Ferns Very Open Mosses

VEGETATION (describe each unit of vegetation using dominants and life form/height class and canopy cover according to the Muir codes above)

Site 1 (ridge side behind Home Lot 301)

Soil: Trench, Turf, over

Bank off / near / tall trees Low Woodland over

low 30-75% tall trees, Gomp form, over 1950 forest

2-10% herbs, *Prostanthera*, Blue! 59411

off. Canopy: *Pteris*, *Woodsia*, *Dryas*, *Alpinia*, *Conocarpus*, *Passiflora*, *Sida*, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

COND Very Good - Good one Veldt

Thicket: *Conocarpus*, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Acacia, *Prostanthera*, *Prostanthera*, *Prostanthera*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Tall off / *Sida*, *Conocarpus*, *Leptocarpus*, *Leptocarpus*

Prostanthera, *Prostanthera*, *Prostanthera*, *Prostanthera*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Acacia, *Prostanthera*, *Prostanthera*, *Prostanthera*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Veldt area

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Acacia, *Prostanthera*, *Prostanthera*, *Prostanthera*

Leptocarpus, *Leptocarpus*, *Leptocarpus*, *Leptocarpus*

Deep valley, *Prostanthera*, *Prostanthera*, *Prostanthera*

with *Leptocarpus*

Fauna comments

Small wet patch, *Prostanthera*, *Prostanthera*, *Prostanthera*

Adjacent bushland (refer to aerial photograph)

From Kate Williams
for info at this stage.
June 2002

Environmental Management Plan
Doghill Road Bushland Bush Forever Site 369
BALDIVIS

SUMMARY

- Overview
- Management Goals

1.0 Introduction

Purpose of report

1.1 Location

1.2 Background

1.2.1 Planning Context

1.2.2 Bush Forever

2.0 Site Characteristics

2.1 Topography, Climate etc.

2.2 Soils

2.3 Drainage (?)

2.4 Vegetation ^{DRF} _{TEU}

2.5 Surrounding Land Uses

* Look at boundary
modifications perhaps
- DRF.

3.0 Resource Management

3.1 Vegetation

3.1.1 Objectives

3.1.2 Recommendations

3.2 Flora

3.2.1 Objectives

3.2.2 Recommendations

3.3 Fauna

3.3.1 Objectives

3.3.2 Recommendations

3.4 Disease and Pests

3.4.1 Objectives

3.4.2 Recommendations

3.5 Fire Management

3.5.1 Objectives

3.5.2 Recommendations

3.6 *Feral Animals and Domestic Pets*

3.6.1 Objectives

3.6.2 Recommendations

3.7 *Environmental Weeds*

3.7.1 Objectives

3.7.2 Recommendations

3.8 *Bushland Restoration*

3.8.1 Objectives

3.8.2 Recommendations

4.0 Implementation + ~~Control~~ Funding

5.

Management Issues

Dieback (*Phytophthora* spp.)

Tree deaths (*Banksia* spp.) were observed throughout Doghill Road Bushland but it is unknown whether this is due to dieback, drought, tree age or other factors.

*Recommend that the City Of Rockingham employ someone to conduct a survey for dieback.



Banksia deaths

Fire

The bushland at Doghill Road is largely long unburnt. On many lots the leaf litter layer was up to 15cm deep. There is no evidence of tree deaths due to fire or charred timber on living trees. Even stumps of large Jarrah trees logged in the past have not been burnt. A number of landowners expressed concern over the hazard posed by this and some landowners have introduced goats to reduce fuel loads. Bulldozing and 'tidying up' of dead timber was also observed, presumably in an effort to reduce the fire hazard.

*Recommend a fire management plan be drawn up in consultation with CALM, BGPA, ?DEP and Glen Kelly (ATSIC). Suggest a controlled burn is needed to alleviate landowners concern and promote regeneration.

Weeds

The bushland at Doghill Road is largely intact and weed free. Veldt grass, Hypochaeris and Ursinia were present along firebreaks and on some lots throughout the bushland. Most Tuart trees throughout the site have an entirely weedy understorey comprising of Veldt grass, Arum lily, Geraldton Carnation Weed amongst others.

*Recommend veldt grass control along/on the edges of firebreaks. And if resources available weed control under Tuart (especially of Arum lilies – find out if they are a declared weed)

Livestock

Horses and goats were witnessed on some lots and have the potential to significantly degrade the bushland.

* Recommend all regionally significant vegetation be fenced and livestock excluded.

Flora and Vegetation

Vegetation

The vegetation on the lots within BFS 369 is largely uniform *Banksia attenuata*, *B. menziesii*, *Allocasuarina fraseriana* Low Open Forest with varying elements of *Eucalyptus marginata* and *E. gomphocephala*. The presence/absence of these species would be largely due to past logging. *Kunzea glabrescens*, *Xylomelum occidentale* and *Jacksonia furcellata* are also locally abundant on some lots.

Keighery (1999) states that on the basis of inspection of Lots 300, 301 and 302 the bushland was found to be Low Woodland dominated by combinations of *Banksia attenuata*, *Banksia menziesii* and *Allocasuarina fraseriana*. And that areas of the woodland contain scattered *Eucalyptus marginata* and/or *E.gomphocephala*. The findings of the study conducted in May 2002 are in agreeance with the above. This vegetation type is typical of the Karrakatta Central and South vegetation complex (after Heddle, ref?) and is most likely floristic community type 28 (Spearwood *Banksia menziesii* or *Banksia attenuata* – *Eucalyptus* woodland) (after Gibson et al., 1994).

Condition

Most lots within BFS 369 are in Excellent-Very Good Condition (could expand using definition, after Keighery not Trudgen, from BF) with the main disturbance due to weeds, particularly Veldt grass and Ursinia. These weeds are predominantly found on the edges of bushland/firebreaks and under large Tuart trees. *Banksia* and some other tree deaths were observed throughout the bushland and it is not known whether this is due to dieback disease (*Phytophthora* spp.) or natural attrition(?) or the long time since fire inhibiting regeneration. The bushland has been selectively logged and Jarrah (*E.marginata*) almost entirely removed from the bushland. Large stumps were observed, up to 2-3m in diameter (would you agree with that?).

The bushland also has an unusual fire history for the Swan Coastal Plain, appearing to be long unburnt (apart from two lots, one where a wildfire passed through last summer and one where the landowner conducts 'patch burning'). Anecdotal evidence, the presence of deep leaf litter layers and the absence of any fire-scarring or tree deaths due to fire suggest that it may have been as long as 30-50 years since the bushland has had a major fire. Might want to clarify this next bit with Bronwen or Dave Mitchell or someone like that. Evidence suggests that ideal fire intervals for species regeneration are somewhere in the order of 12-20 years (this is just from memory from the fire symposium). Fire at intervals less than this can result in local extinction of species that reproduce from seed.

The fire "hazard" posed by deep layers of leaf litter and dead timber is of concern to some landowners and in several cases goats have been introduced to the bushland to

reduce the fuel load. One lot has also been "parkland cleared" in an effort to tidy up dead timber.

Apart from the recent introduction of goats, most of the lots within BFS 369 have not been grazed recently. It is possible that at some time in the past stock were tethered to large Tuart trees, hence the presence of weeds in these areas (although it is more likely that Tuart suppresses native understorey species and hence creates a niche for weeds to invade - also possible that birds roosting in these trees are dispersing weeds like Arum lily). Horses were observed in the bushland on one lot and a greater weed presence was observed here.

Numerous fox dens were present in the bushland - presumably preferring the close proximity of poultry farms! Few kangaroos observed by residents. Other wildlife?? Did we see rabbit droppings?.

Flora

A total of 88 plant taxa were recorded at Doghill Road Bushland, comprising 73 native and 15 weed species. Twenty-nine flowering plant families were sampled, the largest representation being from the Proteaceae and Papilionaceae (10 taxa each). The major weed families were Asteraceae (5 taxa) and Poaceae (4 taxa). As the flora survey was conducted in May/early June when there were relatively few plants flowering it is recommended that a follow-up mid/late spring inspection be carried out.



Calytrix fraseri



Lomandra preissii

Appendix – Vegetation Structural Descriptions, Condition and Photographs

Lot 8

Banksia attenuata, *Banksia menziesii*, *Allocasuarina fraseriana* Low Woodland with occasional *Eucalyptus marginata* over *Kunzea glabrescens*, *Jacksonia furcellata* Tall Open Scrubland over *Hibbertia hypericoides* Open Low Heath over *Conostephium pendulum* Low Open Shrubland

Very Good – Excellent; past logging, long unburnt, Banksia and Epacrid deaths



Lot 21

Banksia attenuata, *Banksia menziesii*, *Eucalyptus marginata* Low Open Forest over *Hibbertia hypericoides* Open Low Heath with occasional *Acacia pulchella* and *Kunzea glabrescens*.

Excellent; Very little disturbance

Lot 20

Banksia attenuata, *Banksia menziesii*, *Allocasuarina fraseriana* Low Open Forest with occasional *Xylomelum occidentale* over *Jacksonia furcellata* Tall Shrubland over *Acacia pulchella* Open Shrubland over *Hibbertia hypericoides* Open Low Heath.

Very Good to Excellent; Briza throughout. Has been patch-burnt – greater structural diversity.



Lot 17

Banksia attenuata, *Banksia menziesii*, *Allocasuarina fraseriana* Low Open Forest with occasional *Eucalyptus gomphocephala* over *Hibbertia hypericoides* Open Low Heath with occasional *Acacia pulchella*.

Very Good – Good; Horses, fire, foxes, power line, weeds, some tree deaths, past logging.



Lot 1101

Banksia attenuata, *Banksia menziesii*, *Allocasuarina fraseriana* Low Open Forest with occasional emergent *Eucalyptus gomphocephala* over *Jacksonia furcellata* Tall Open Shrubland over *Hibbertia hypericoides* Open Low Heath over *Conostylis aculeata* Low Open Shrubland.

Very Good; very weedy under Tuart (Veldt grass, Arum lilies), foxes, enhancement plantings (?macadamia farm), past logging, ?dieback



Lot 936

Banksia attenuata, *Banksia menziesii* Low Open Forest with occasional *Allocasuarina fraseriana* and *Eucalyptus marginata* over *Hibbertia hypericoides* Open Low Heath over *Ehrharta calycina* Very Open Grassland over *Dichopogon capillipes* Very Open Herbland

Very Good – Excellent; some weeds especially under large trees, long unburnt, foxes



Lot 935

Banksia attenuata, *Banksia menziesii*, *Allocasuarina fraseriana* Low Open Forest with occasional emergent *Eucalyptus gomphocephala* over *Hibbertia hypericoides* Open Low Heath over *Gompholobium tomentosum*, *Acacia pulchella* Low Open Shrubland over *Ehrharta calycina* Very Open Grassland over *Conostylis aculeata* Open Herbland.

Very Good – Excellent; some weeds (*Ursinia* germinating), long unburnt, 'horticulture'.



Lot 1

Banksia attenuata, *Banksia menziesii* Low Open Forest with occasional *Allocasuarina fraseriana*, *Kunzea glabrescens* and *Eucalyptus marginata* over *Hibbertia hypericoides* Open Low Heath over *Conostylis aculeata* Open Herbland.

Very Good – Excellent; some weeds, foxes

Lot 2 * not visited

Banksia attenuata, *Banksia menziesii* Low Open Forest with occasional *Allocasuarina fraseriana* over *Kunzea glabrescens*, *Jacksonia furcellata* Tall Open Scrubland over over *Hibbertia hypericoides* Open Low Heath over *Amphipogon turbinatus* Grassland.

Very Good – Good; Rubbish dumping, tracks, tree deaths, more open.



Lot 300 (Rose Farm)

Banksia attenuata, *Banksia menziesii* Low Open Forest with occasional *Allocasuarina fraseriana* over *Kunzea glabrescens*, *Jacksonia furcellata* Tall Open Scrubland over over *Hibbertia hypericoides* Open Low Heath over *Lepidosperma squamatum* Very Open Sedgeland.

Very Good – Excellent; Tree deaths – manager thinks there is dieback throughout. Has also sprayed Veldt and Love grass with Fusilade around house (within BFS).



Lot 301

Not visited. Parkland cleared, pushed up piles of dead (?) Banksias. Looks fairly weed free, may regenerate if left (goats excluded).





Lot 302

Banksia attenuata, *Banksia menziesii* Low Open Forest with occasional *Allocasuarina fraseriana* and *Eucalyptus marginata* over *Jacksonia furcellata* Tall Open Shrubland over *Hibbertia hypericoides* Open Low Heath over *Conostylis aculeata* Open Herbland over *Ehrharta calycina* Very Open Grassland.

Very Good – Good; Past logging, current grazing by goats to reduce fuel load, foxes and rabbits (?), more veldt grass.





07/06/2002

BFS369 Doghill Road Species List

Taxon Name

Family: Anthericaceae

Arnocrinum preissii
Corynotheca micrantha
Dichopogon capillipes

Family: Apiaceae

Eryngium rostratum

Family: Araceae

* Zantedeschia aethiopica

Family: Asclepiadaceae

* Gomphocarpus fruticosus

Family: Asteraceae

* Arctotheca calendula
* Conyza albida
* Hypochaeris glabra
* Taraxacum officinale
* Ursinia anthemoides

Family: Casuarinaceae

Allocasuarina fraseriana

Family: Colchicaceae

Burchardia umbellata

Family: Cyperaceae

Lepidosperma longitudinale
Lepidosperma scabrum
Lepidosperma squamatum
Mesomelaena pseudostygia
Schoenus clandestinus
Schoenus grandiflorus

Family: Dasypogonaceae

Acanthocarpus preissii
Calectasia cyanea
Dasypogon bromeliifolius
Lomandra micrantha
Lomandra preissii

Family: Dilleniaceae

Hibbertia hypericoides
Hibbertia racemosa

Family: Droseraceae

Drosera erythrorhiza
Drosera pallida

Family: Epacridaceae

Astrofoma pallidum

* = Alien species

07/06/2002

BFS369 Doghill Road Species List

Taxon Name

Brachyloma preissii
Conostephium pendulum
Conostephium preissii
Leucopogon conostephioides

Family: Euphorbiaceae

* Euphorbia terracina

Family: Goodeniaceae

Scaevola canescens

Family: Haemodoraceae

◦ Anigozanthos manglesii
Conostylis aculeata
Haemodorum spicatum

Family: Iridaceae

* Gladiolus caryophyllaceus
Patersonia occidentalis
* Romulea rosea

Family: Mimosaceae

Acacia huegelii
Acacia pulchella
Acacia stenoptera
Acacia willdenowiana

Family: Myrtaceae

Calytrix fraseri
Eucalyptus gomphocephala
Eucalyptus marginata
Kunzea glabrescens

Family: Orchidaceae

Leporella fimbriata
Oligochaetochilus sanguineus

Family: Papilionaceae

Bossiaea eriocarpa
Daviesia divaricata
Daviesia triflora
Gompholobium tomentosum
Hardenbergia comptoniana
Hovea trisperma
Jacksonia furcellata
Jacksonia sternbergiana
Kennedia prostrata
* Lupinus cosentinii

Family: Phormiaceae

Dianella revoluta

Family: Poaceae

Amphipogon turbinatus
* Avena barbata
* Briza maxima
* Ehrharta calycina

* *Lagurus ovatus*

* = Alien species

07/06/2002

BFS369 Doghill Road Species List

Taxon Name

Family: Proteaceae

Adenanthos cygnorum
Banksia attenuata
Banksia grandis
Banksia ilicifolia
Banksia menziesii
Persoonia saccata
Petrophile linearis
Stirlingia latifolia
Synaphea spinulosa
Xylomelum occidentale

Family: Restionaceae

Alexgeorgea nitens
Desmocladius flexuosus
Dielsia stenostachya
Lyginia barbata

Family: Rubiaceae

Opercularia vaginata

Family: Solanaceae

* Solanum americanum

Family: Stylidiaceae

Stylidium brunonianum
Stylidium piliferum
Stylidium repens
Stylidium repens

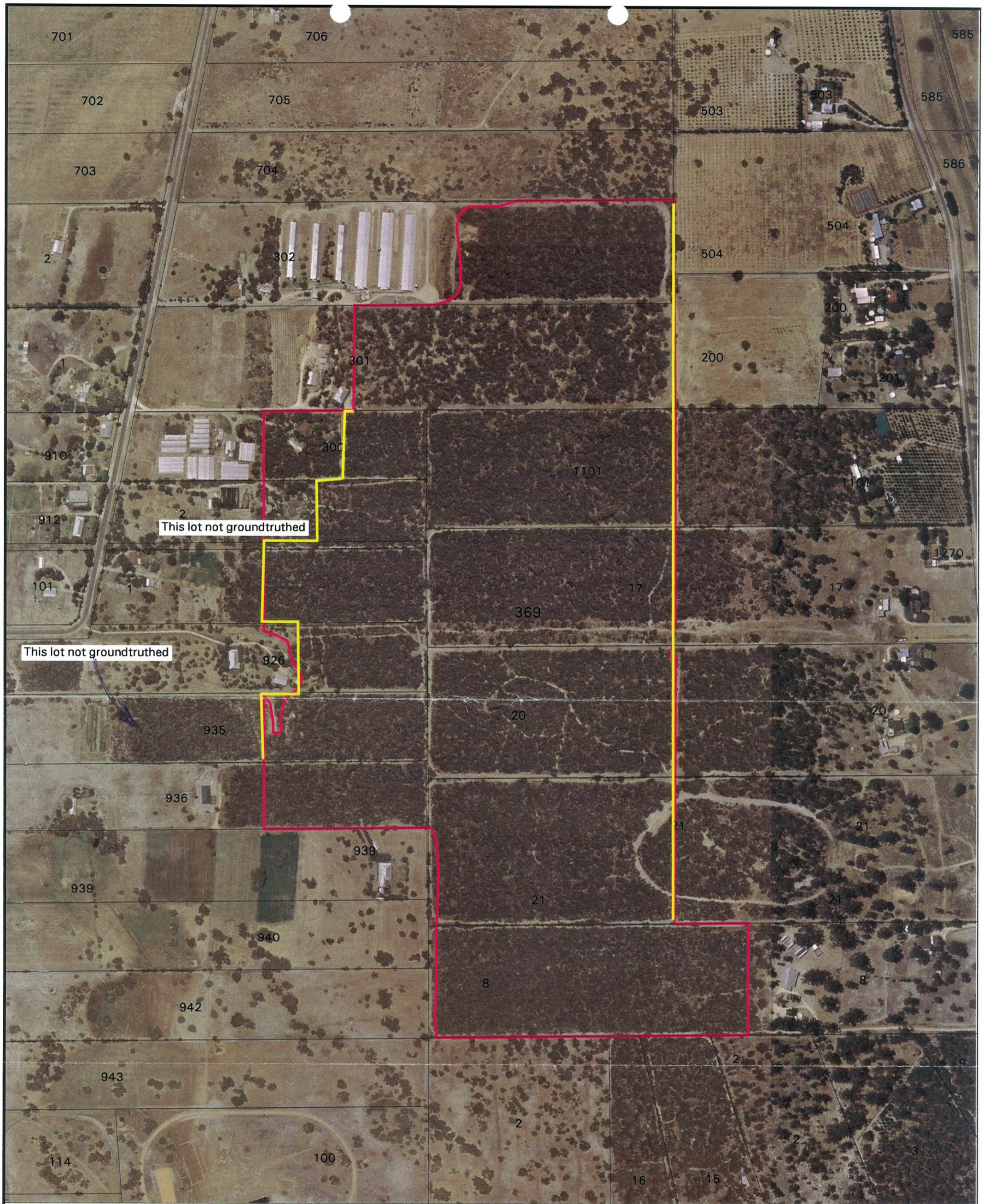
Family: Xanthorrhoeaceae

Xanthorrhoea preissii




Family: Zamiaceae

Macrozamia riedlei

* = Alien species



Bush Forever Site 369
Doghill Road
BALDIVIS
Possible boundary changes

-  Bush Forever 2000 - Site Boundaries
-  Cadastre with Lot Numbers
-  Proposed Changes to BF boundary

Map Ident: plot020607_1	DATE: 07 Jun 2002
Prepared By: Kate Williams	Prepared For: File
Scale 1:5000	DPI INTERNAL USE ONLY

0  250 m

