

YANGEBUP AND LITTLE RUSH LAKES, YANGEBUP

Boundary Definition: protected area/bushland taken to cadastre boundary

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 256

Area (ha): bushland 27.7 (Site also includes open water.)

Map no. 58, 59

Map sheet series ref. no. 2033-I NW, 2033-I SW

Other Names: part of the Beeliar Regional Park

Local Authorities (Suburb): City of Cockburn (Yangebup, Success)

System 6 (1983): Part M93 Part System area bushland, only bushland described

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)

Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

Wetlands (within the Spearwood/Bassendean Dune interface)

Holocene Swamp Deposits (Qhw: Ms5)

VEGETATION AND FLORA

Vegetation Complexes

Bassendean Dunes

Bassendean Complex — Central and South (at interface of Bassendean Complex — Central and South and Karrakatta Complex — Central and South)

Spearwood Dunes

Karrakatta Complex — Central and South

Wetlands

Herdsmen Complex

Floristic Community Types: *not sampled, types inferred

Supergroup 2: Seasonal Wetlands

*11 Wet forests and woodlands

*12 *Melaleuca teretifolia* and/or *Astartea* aff. *fascicularis* shrublands

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau AND/OR

Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

WETLANDS

Wetland Types: lake, sumpland

Natural Wetland Groups

Bassendean Dunes

Jandakot (B.3)

Spearwood—Bassendean interface

Bibra (S/B.1)

Wetland Management Objectives: Conservation (100.3ha)

Swan Coastal Plain Lakes EPP: 90.3ha + 8.3ha = 98.6ha (total)

THREATENED ECOLOGICAL COMMUNITIES

Not assessed

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: open water, vegetated wetland, vegetated uplands

Vegetation and Flora: limited survey (EPA and WAWA 1990, Keighery, BJ, 1996a, Murdoch University 1988, Newman 1976, Weston 1993); part Site — Semeniuk, V&C Research Group 1997a (Reserve 11); detailed survey (Ecoscape 1994b)

Structural Units: mapping (Ecoscape 1994b, EPA and WAWA 1990, Murdoch University 1988, Newman 1976)

Uplands: *Eucalyptus gomphocephala*, *E. marginata* and *E. calophylla* Woodland; *Eucalyptus marginata* Woodland; *Banksia attenuata* and *B. menziesii* Low Woodland with *Eucalyptus marginata*

Wetlands: *Eucalyptus rudis* Open Forest; *Melaleuca raphiophylla* and *Eucalyptus rudis* Woodland; *Melaleuca preissiana* and *Banksia ilicifolia* Low Woodland; *Melaleuca teretifolia* Low Woodland to Tall Open Scrub; *Acacia saligna* Tall Shrubland; Sedgeland to Closed Sedgeland dominated by *Baumea articulata* or **Typha orientalis*

Scattered Native Plants: not assessed

Vegetation Condition: <20% Excellent to Very Good, >80% Good to Completely Degraded, with areas of severe localised disturbance (mapping, Ecoscape 1994b, Weston 1993)

Total Flora: 140 native taxa, 68 weed taxa (Ecoscape 1994b, part Site — Semeniuk, V&C Research Group 1997a (Reserve 11)) (estimated >80% expected native flora)

Significant Flora: Weston 1993 — *Dodonaea hackettiana* (4) (Little Rush Lake)

Fauna: multiple survey for birds (93 species) (RAOU 1996 D) and limited survey for native mammals (3 species), reptiles (21 species) and amphibians (6 species) (Murdoch University 1988). Important permanent waterbody for feeding and wetland area for breeding. Counts of Pink-eared Ducks and Blue-billed Ducks represent the second highest numbers of these species for 300 wetlands in south western Australia. Significant bird species: category 1 (1), category 2 (8), category 3 (15) and category 4 (6). Significant mammal species: Quenda (Friend 1996 D)

Linkage: adjacent bushland to the south (Site 391, across road), north (Site 254, across road) and west; part of Greenways 78, 81 (Tingay, Alan & Associates 1998a); part of a regionally significant contiguous bushland/wetland linkage (Part A, Map 7)

Other Special Attributes: included in Beelihar Regional Park Proposal (DPUD 1992a)

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Entered in the Interim List of the Register of the National Estate; location for JAMBA/CAMBA species; 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, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation

Recommendation: Site with Some Existing Protection; the care, control and management of this Site for conservation purposes within Beelihar Regional Park is endorsed (see Table 3, Volume 1).

YANGEBUP AND LITTLE RUSH LAKES, YANGEBUP

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SECTION 1: CADASTRAL INFORMATION

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

Bushplan Site no. 256 **Map no.** 67, 74 **Map sheet series ref. no.** 2033-I NW, 2033-I SW

System 6 (1983): Part M93 Part System area bushland, only bushland described

Other Names: not known

Area (ha): total 183.6 (includes open water); bushland 27.7

Local Authorities (Suburb)

Zoning

City of Cockburn (Yangebup, Success)

MRS: Parks and Recreation, Urban

Ownership Categories

TPS: Parks and Recreation, Public Purposes, Landscape

State Government, Private (commercial organisation),

Lot/Location/Reserve numbers (Purpose),

Local Government

Street name

0, 1, 2, 3, 4, 5, 6 Parkes St; 1, 7, 8, 9, 12, 13, 14, 15, 677 Yangebup Rd; 8 Hammond Rd; 298 Pioneer Dr; 299 Pelican Rmbl; 2882 Grassbird Loop, 2 Dotterel Wy; 334 Forrest Rd; 334 Orchard Rd; 4107, 27950 street not identified

Crown Reserve

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Structural Units: mapping (Ecoscape 1994b, EPA and WAWA 1990, Murdoch University 1988, Newman 1976)

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Linkage: adjacent bushland to the south (BS391) and west; part of proposed Greenways 103, 96 (Tingay, Alan & Associates 1997a); part of a regionally significant contiguous bushland/wetland linkage (Volume 2A, Map 8)

Other Special Attributes: included in Beeliar Regional Park Proposal (DPUD 1992a)

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Interim List of the Register of the National Estate; Location for JAMBA/CAMBA species

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, Rarity, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation

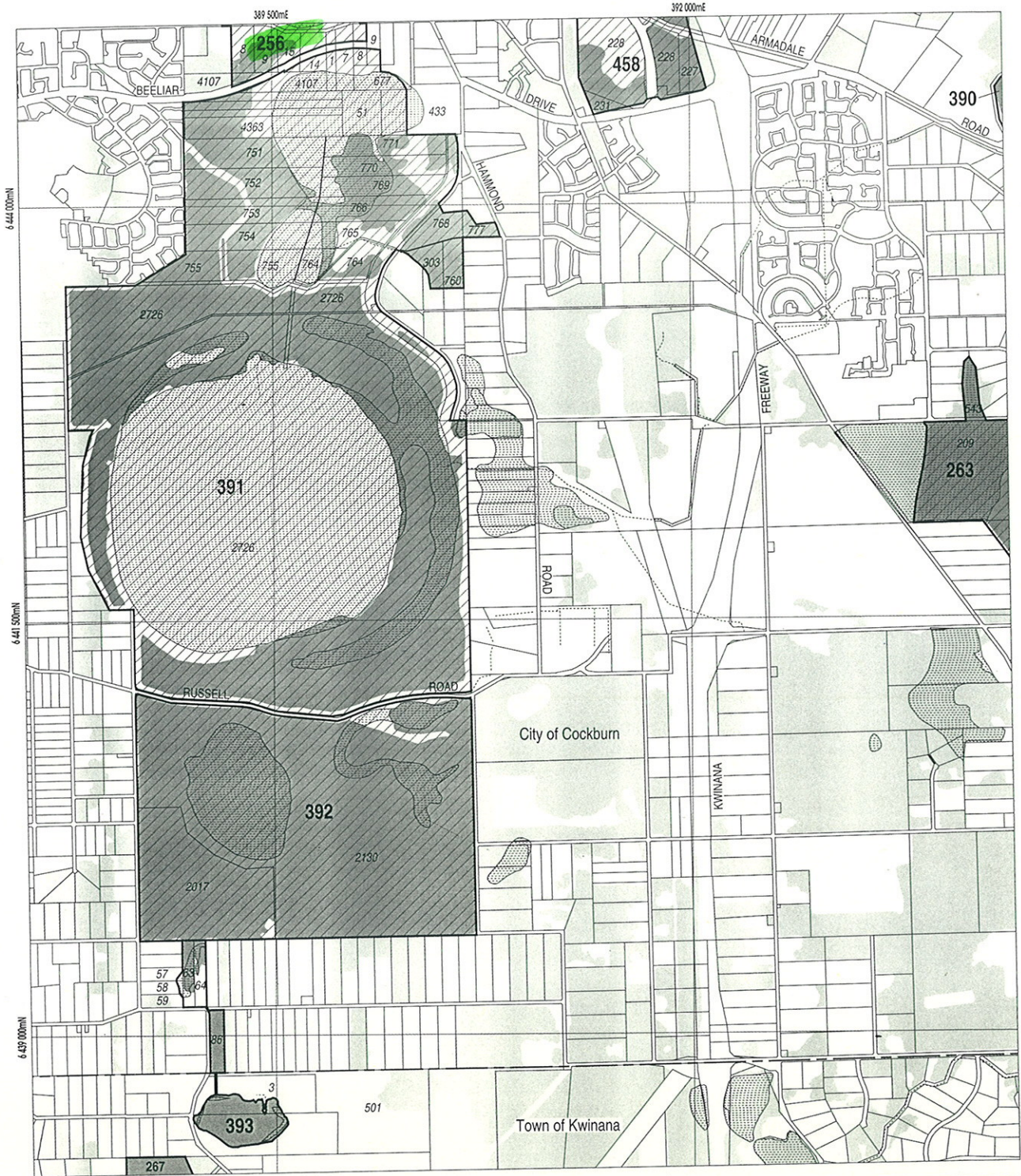
Opportunities and/or Constraints

Opportunities: Bushplan Site/part Bushplan Site subject to Swan Coastal Plain Lakes EPP; location of Scheduled Fauna, conservation category wetlands; under MRS Parks and Recreation Reservation and TPS Parks and Recreation Zoning and Landscape Zoning, Crown Reserve

Constraints: private land; under MRS Urban Zoning

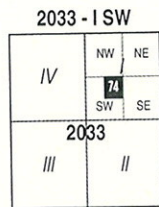
Recommendation: The care, control and management of this Bushplan Site for conservation purposes within Beeliar Regional Park is endorsed.



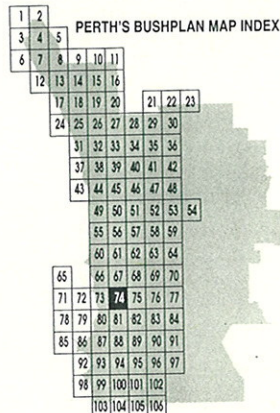


LEGEND

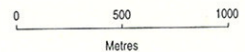
- 472** Bushplan Sites With Regionally Significant Bushland
- Other Native Vegetation
- Conservation Category Wetlands
- Bushplan Sites With Some Existing Protection
- Lot Number, Location Number
- Channel Wetlands
- Local Government Boundary



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



SCALE

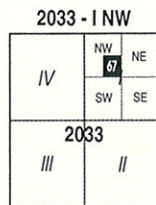


Produced by Project Mapping Section
 Land Information Branch, Ministry for
 Planning, Perth W.A. November 1998
 ntw-map9/environ/bushplan/bushv2_74.dgn
 Cadastral Data supplied by Department
 of Land Administration, W.A.
 Wetlands Data supplied by
 Water and Rivers Commission
 Native Vegetation Extent for Study Area
 supplied by Agriculture Western Australia

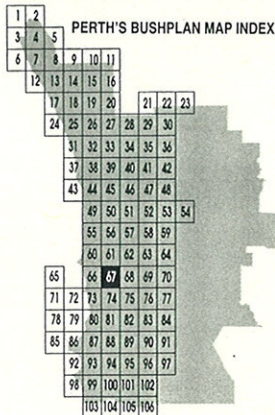


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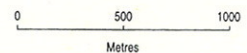
- 472 Bushplan Sites With Regionally Significant Bushland
- Other Native Vegetation
- Conservation Category Wetlands
- Bushplan Sites With Some Existing Protection
- 696 Lot Number, Location Number
- Channel Wetlands
- Local Government Boundary



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



SCALE



Produced by Project Mapping Section
Land Information Branch, Ministry for
Planning, Perth W.A. November 1998
ntw-map18/enviro/bushplan/bushv2_67.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

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for M93 Cockburn Wetlands - Eastern Chain (extracted from Swan Coastal Plain database, Thom 1-2, Harry 1-6, and B.J. Keighery sites Beel 1-3, 9/5/1995).

Department of Environmental Protection System 6 Update: Site Based Flora List M93 Cockburn Wetlands - Eastern Chain

(extracted from the CALM Swan Coastal Plain database sites Thom 1-2, Harry 1-6 and B.J. Keighery sites Beel 1-3, 208 taxa combined, 9/5/95)

Aizoaceae

- * *Carpobrotus edulis*

Anthericaceae

- Caesia occidentalis*
- Chamaescilla corymbosa*
- Dichopogon capillipes*
- Laxmannia squarrosa*
- Sowerbaea laxiflora*
- Thysanotus manglesianus*
- Thysanotus patersonii*
- Thysanotus sp. manglesianus/patersonii scps*
- Thysanotus sp. scps*
- Thysanotus sparteus*
- Thysanotus thyrsoides*
- Thysanotus triandrus*
- Tricoryne tenella*

Apiaceae

- Eryngium pinnatifidum subsp. pinnatifidum scps*
- Homalosciadium homalocarpum*
- Hydrocotyle scutellifera*
- Platysace compressa*
- Trachymene pilosa*
- Xanthosia huegelii*
- Xanthosia sp. scps*

Araceae

- * *Zantedeschia aethiopica*

Asteraceae

- * *Aster subulatus*
- * *Conyza albida*
- * *Conyza sp. scps*
- Hyalosperma cotula*
- * *Hypochoeris glabra*
- Ixiolaena viscosa*
- * *Lactuca serriola*
- Lagenifera huegelii*
- Podolepis gracilis*
- Podotheca angustifolia*
- Podotheca chrysantha*
- Quinetia urvillei*
- Siloxerus humifusus*
- * *Sonchus oleraceus*
- * *Ursinia anthemoides*
- Waitzia citrina*
- Waitzia suaveolens*

Campanulaceae

- * *Wahlenbergia capensis*

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Flora list for M93 Cockburn Wetlands - Eastern Chain (extracted from Swan Coastal Plain database, Thom 1-2, Harry 1-6, and B.J. Keighery sites Beel 1-3, 9/5/1995).

Wahlenbergia preissii

Caryophyllaceae

- * Cerastium glomeratum
- * Petrorhagia velutina
- * Stellaria media

Casuarinaceae

Allocasuarina fraseriana
Allocasuarina humilis

Centrolepidaceae

Centrolepis drummondiana

Colchicaceae

Burchardia umbellata

Crassulaceae

- Crassula colorata
- Crassula exserta
- * Crassula glomerata
- Crassula pedicellosa

Cyperaceae

- Baumea articulata
- Baumea juncea
- Carex preissii
- * Isolepis marginata
- Lepidosperma "coastal terete" scps (BJK&NG 231)
- Lepidosperma angustatum
- Lepidosperma longitudinale
- Lepidosperma squamatum
- Mesomelaena pseudostygia
- Schoenus aff. laevigatus scps
- Schoenus brevisetis
- Schoenus clandestinus
- Schoenus curvifolius
- Schoenus rodwayanus
- Tetraria octandra

Dasypogonaceae

Dasypogon bromeliifolius
Lomandra caespitosa
Lomandra hermaphrodita
Lomandra nigricans
Lomandra preissii
Lomandra suaveolens

Dilleniaceae

Hibbertia huegelii
Hibbertia hypericoides
Hibbertia racemosa
Hibbertia subvaginata

Droseraceae

Drosera erythrorhiza

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Drosera macrantha
Drosera menziesii
Drosera paleacea
Drosera paleacea scps subsp. *paleacea*
Drosera stolonifera subsp. *stolonifera*

Epacridaceae

Astroloma pallidum
Brachyloma preissii
Conostephium pendulum
Leucopogon conostephioides
Leucopogon gracillimus
Leucopogon parviflorus
Leucopogon propinquus
Leucopogon racemulosus

Euphorbiaceae

Phyllanthus calycinus
Poranthera microphylla

Goodeniaceae

Dampiera linearis
Lechenaultia floribunda

Haemodoraceae

Anigozanthos humilis
Conostylis aculeata
Conostylis juncea
Conostylis setigera
Phlebocarya ciliata

Haloragaceae

Gonocarpus pithyoides

Iridaceae

* *Gladiolus caryophyllaceus*
Patersonia occidentalis
Patersonia occidentalis (swamp form) sthst
* *Romulea rosea*

Juncaginaceae

Triglochin procerum

Lauraceae

Cassytha flava
Cassytha racemosa

Lobeliaceae

Lobelia alata
Lobelia tenuior

Menyanthaceae

Villarsia sp. scps

Mimosaceae

Acacia huegelii

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Acacia pulchella
Acacia stenoptera

Moraceae

* Ficus carica

Myrtaceae

Astartea aff. fascicularis sthst
Calytrix flavescens
Calytrix fraseri
Eucalyptus calophylla
Eucalyptus marginata
Eucalyptus rudis
Eucalyptus todtiana
Hypocalymma angustifolium
Hypocalymma robustum
Kunzea ericifolia
Melaleuca acerosa
Melaleuca lateritia
Melaleuca preissiana
Melaleuca sp. B FPR (BJK&NG 054)
Melaleuca thymoides
Pericalymma ellipticum
Scholtzia involucrata

Onagraceae

Epilobium billardierianum
Epilobium hirtigerum

Orchidaceae

Caladenia flava
Caladenia latifolia
Caladenia sp. scps
Diuris longifolia
Elythranthera sp. scps
Lyperanthus nigricans
Microtis media
Microtis media warr subsp. media
* Monadenia bracteata
Thelymitra benthamiana
Thelymitra sp. scps

Papilionaceae

Bossiaea eriocarpa
Daviesia divaricata
Gompholobium tomentosum
Hardenbergia comptoniana
Hovea pungens
Hovea trisperma var. trisperma
Isotropis cuneifolia
Jacksonia sternbergiana
Kennedia prostrata
Nemcia capitata
Pultenaea reticulata
Sphaerolobium vimineum
* Trifolium cernuum

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- * *Vicia sativa*

Phormiaceae

Dianella revoluta

Poaceae

- * *Aira caryophyllea*
- * *Aira cupaniana*
- Amphipogon laguroides*
- Amphipogon turbinatus*
- * *Briza maxima*
- * *Briza minor*
- * *Bromus diandrus*
- Danthonia occidentalis*
- Deyeuxia quadriseta*
- Dichelachne crinita*
- * *Ehrharta calycina*
- * *Ehrharta longiflora*
- * *Holcus setiger*
- Microlaena stipoides*
- Stipa compressa*
- Stipa flavescens*
- Stipa sp. scps*
- * *Vulpia bromoides*
- * *Vulpia sp. scps*

Polygalaceae

Comesperma calymega

Primulaceae

- * *Anagallis arvensis*
- * *Anagallis arvensis* var. *arvensis* FPR

Proteaceae

Banksia attenuata
Banksia ilicifolia
Banksia littoralis
Banksia menziesii
Hakea prostrata
Petrophile linearis
Stirlingia latifolia

Restionaceae

Hypolaena exsulca
Loxocarya flexuosa
Lyginia barbata

Rubiaceae

Opercularia hispidula
Opercularia vaginata

Rutaceae

Boronia crenulata
Eriostemon spicatus

Santalaceae

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Leptomeria cunninghamii

Solanaceae

* Solanum nigrum

Stylidiaceae

Levenhookia pusilla

Levenhookia stipitata

Stylidium brunonianum

Stylidium piliferum

Stylidium repens

Stylidium schoenoides

Thymelaeaceae

Pimelea rosea

Pimelea sulphurea

Xanthorrhoeaceae

Xanthorrhoea preissii

Zamiaceae

Macrozamia riedlei

254

256

BUSHPLAN SITES CORRECTED



WESTERN
AUSTRALIAN
PLANNING
COMMISSION



B BK 28/10/98

254

CHECK OMNIBUS AMENDMENT LINE.

DEB,

USE WESTERN EXTENT OF
SW DISTRICTS OMNIBUS 3 B
LINE FOR P&K FOR
MARKED PORTION

2185E

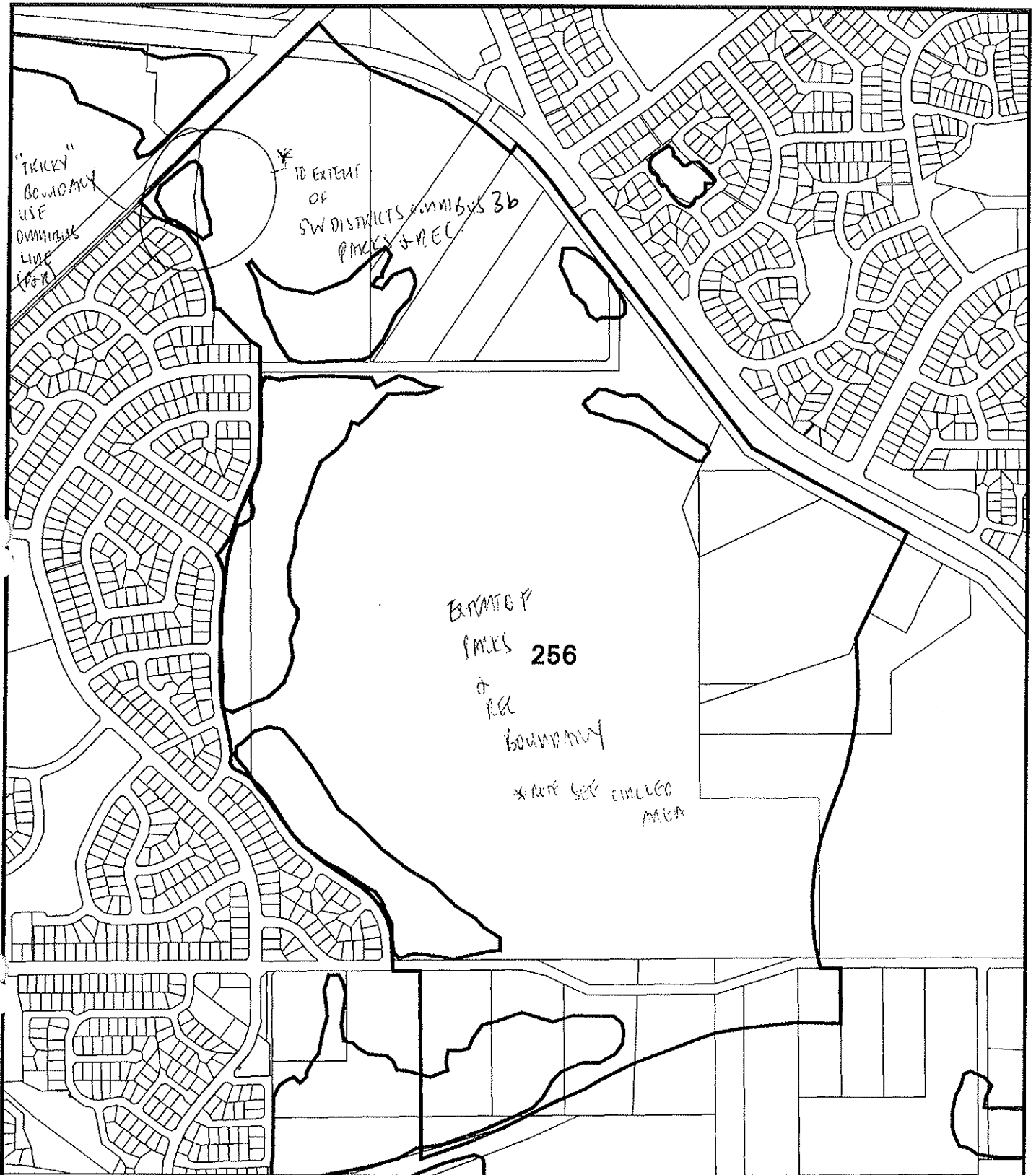
256

BUSHPLAN SITES CORRECTED






WESTERN
AUSTRALIAN
PLANNING
COMMISSION





bp site 256

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

MFP INTERNAL USE ONLY

Prepared By: Andrea Zappacosta

Prepared For:

Map Ident: plot980627_1

Date: 27 May 98

Scale 1:10583

R. A. O. U. TRACKING DATABASE

23/06/96

PARK SIGHTINGS REPORT

Page No.

1

Yangebup Lake (M93)

ORDER:	REF:	BIRD NAME		NO. SIGHTINGS
0018	0216	Blue-billed Duck	3	3
0019	0217	Musk Duck	3	4
0022	0203	Black Swan		4
0025	0207	Australian Shelduck		6
0028	0202	Australian Wood Duck		1
002	0208	Pacific Black Duck		4
0033	0212	Australasian Shoveler	3	4
0035	0211	Grey Teal		5
0039	0213	Pink-eared Duck	3	3
0040	0215	Hardhead	3	3
0041	0061	Australasian Grebe		4
0042	0062	Hoary-headed Grebe		5
0043	0060	Great Crested Grebe		1
0128	0101	Darter		1
0129	0100	Little Pied Cormorant		2
0132	0097	Little Black Cormorant		2
0133	0096	Great Cormorant		2
0135	0106	Australian Pelican		1
0139	0188	White-faced Heron		4
0142	0189	White-necked Heron		2
0145	0187	Great Egret		5
0150	0192	Nankeen Night Heron		2
0157	0179	Australian White Ibis		4
0158	0180	Straw-necked Ibis		3
0160	0182	Yellow-billed Spoonbill		2
0165	0232	Black-shouldered Kite	4	2
0170	0228	Whistling Kite	4	3
0174	0219	Swamp Harrier		4
0181	0225	Little Eagle	4	2
0183	0235	Australian Hobby		4
0192	0046	Buff-banded Rail		1
0198	0049	Australian Spotted Crake		1
0204	0058	Purple Swamphen		6
0205	0056	Dusky Moorhen	3	4
0208	0059	Eurasian Coot		4
0231	0158	Common Greenshank	2	3
0233	0154	Wood Sandpiper	2	2
0235	0157	Common Sandpiper	2	1
0244	0162	Red-necked Stint	2	1
0267	0146	Black-winged Stilt		3
0269	0148	Red-necked Avocet		2
0275	0143	Red-capped Plover		1
0282	0144	Black-fronted Dotterel		2

0297	0125	Silver Gull		3
0324	0957	Rock Dove		1
0326	0988	Laughing Turtle-Dove		2
0327	0989	Spotted Turtle-Dove		1
0330	0034	Common Bronzewing	3	2
0356A	1266	White-tailed Black-Cockatoo	1	1
0359	0273	Galah		3
0362	0271	Little Corella		1
0386	0294	Australian Ringneck		3
0387	0290	Red-capped Parrot		4
0405	0337	Pallid Cuckoo		1
0410	0342	Horsfield's Bronze-Cuckoo		1
0411	0344	Shining Bronze-Cuckoo		1
0401	0242	Southern Boobook		1
0429	0313	Tawny Frogmouth		1
0446	0322	Laughing Kookaburra		2
0451	0326	Sacred Kingfisher		3
0453	0329	Rainbow Bee-eater		3
0471	0532	Splendid Fairy-wren	3	4
0492	0976	Striated Pardalote		3
0512	0465	Weebill	3	2
0517	0463	Western Gerygone		3
0524	0476	Inland Thornbill	3	2
0528	0472	Western Thornbill	3	1
0531	0486	Yellow-rumped Thornbill	3	2
0537	0638	Red Wattlebird		4
0539	0637	Little Wattlebird	4	1
0561	0608	Singing Honeyeater		4
0583	0597	Brown Honeyeater		1
0587	0631	New Holland Honeyeater	4	1
0588	0632	White-cheeked Honeyeater	4	1
0597	0592	Western Spinebill		2
0607	0448	White-fronted Chat		1
0613	0380	Scarlet Robin	3	1
0650	0398	Golden Whistler	3	1
0653	0401	Rufous Whistler		2
0658	0408	Grey Shrike-thrush	3	2
0671	0415	Magpie-Lark		2
0673	0361	Grey Fantail		3
0676	0364	Willie Wagtail		5
0678	0424	Black-faced Cuckoo-shrike		3
0683	0430	White-winged Triller		1
0692	0547	Dusky Woodswallow	4	1
0695	0702	Grey Butcherbird		5
0698	0705	Australian Magpie		4
0706	0930	Australian Raven		5
0763	0357	Welcome Swallow		3
0765	0359	Tree Martin		5
0768	0524	Clamorous Reed-Warbler		2
0781	0574	Silvereye		4

① 1
 ② 4
 ③ 15
 ④ 6

*** END OF REPORT ***

SUMMARY REPORT

TOTAL BIRDS SIGHTED	:	95
TOTAL NUMBER OF CARDS	:	7

*** END OF SUMMARY ***

AREA INFORMATION

System 6 Area (C or M) or Update Area (Update) *MFB*

Conservation Area <i>Calhoun Wetland Reserve</i>
Nature Reserve
Reserve No
National Park
Reserve No
Local Government
Reserve No
Other
Proposed Conservation Areas
Local Government
Reserve No
Other

Conservation Area

Nature Reserve
Reserve No
National Park
Reserve No
Local Government
Reserve No
Other

AREA

Total Area	hectares
Completely Degraded	hectares
comments:	

AREA MAPPED FLORISTIC UNITS

Boundaries: System6 CALM

Units	Site (Condition)	Code	Bound	Area (ha)	Area(ha)

Boundaries determined by use of

aerial photograph
orthophoto
vegetation map
soil map

AUSTRALIAN HERITAGE
COMMISSION

Facsimile

TO: Bronwen Keighery

FROM: Melinda Brouwer

DATE: 15 March

PAGES FOLLOWING: 0

SUBJECT: Beeliar Wetlands

MESSAGE:

Dear Bronwen,

The Commission is happy for you to contact Arthur Weston and obtain a copy of his report for the Commission on the boundaries and condition of the Beeliar Wetlands. If Arthur is unable to help you I will arrange for you to borrow our file copy.

Regards

M Brouwer

Melinda Brouwer

Arthur Weston

458 9738



Department of Environmental Protection

Dear Melinda

Re: Beeliar Wetlands (System 6 areas M92 and M 93)

As discussed by telephone today as part of the Department of Environmental Protection's System 6 Update we would like to have access to a copy of the document by Arthur Weston (1992) on the boundaries and condition of the Beeliar Wetlands. As discussed we will arrange access through Arthur but if this is not possible we would need to borrow the AHC's copy.

Thanks
Bronwen Keighery



Department of
Environmental Protection

Facsimile message

Attention: MELINDA BROUWER

From: BRONWEN KEIGHERY

Telephone: 222 7058. No. of sheets following: ONE

Date: 15 13 1995

Message: _____

Department of Environmental Protection

Westralia Square, 141 St George's Terrace, Perth, WA 6000. Facsimile (09) 322 1598 ☎ (09) 222 7000

BS 256
Box 5.

Natural Reserves Management Study

DEPARTMENT OF ENVIRONMENTAL PROTECTION	
06 NOV 1997	
File No 1	Name
File No 2	Name
File No 3	Name

Report to:

Environmental Division
City of Cockburn

Report by:

V & C Semeniuk Research Group

JUNE 1997

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They are:

1. to preserve biodiversity by preserving species richness.
2. to maintain representative examples of an uncommon type of remnant vegetation in an undisturbed state.
3. to maintain representative examples of a species (*Eucalyptus todiana*) at the southern end of its range
4. to preserve an important refuge area and food source to avifauna, especially honey eaters, Painted Button-quails and Splendid Fairy wrens (Meney 1996).

RESERVE #7 - HOLDSWORTH PARK

The area of reserved remnant vegetation is located on the corner of Mortimer Road and Pearce Road at Wattleup. It is a microscale area (approximately 2 ha.), rectangular in shape. Holdsworth Park incorporates part of the Spearwood ridges. On-site investigation shows that it is underlain by yellow quartz sand. The natural vegetation cover is the Karrakatta Complex-central and south (Hedde et al 1978), and comprises open forest (*E. marginata*, *C. calophylla*, *B. menziesii*, *B. attenuata*). The vegetation is in good condition except along the margins of the children's playground where exotic species have established. A list of these exotic species is given in Table 5.

From information collected during this study, the functions of the reserve are cultural and social. They are:

1. to maintain a representative example of an uncommon type of vegetation in an undisturbed state
2. to provide an area of accessible remnant endemic natural bushland as an informal educational resource for the local community; familiarity with local flora and fauna often results in the development of respect for these habitats and an increased awareness of their values. Residents are more likely to identify with a reserve such as this than with the larger inaccessible faunal and scientific reserve (Harry Waring Reserve) located nearby. It is an important part of the education process.

RESERVE #11 - COCOS PARK RESERVE

The area of reserved remnant vegetation is located on the corner of Forrest Road and the railway line at Bibra Lake. It is a microscale area (approximately 4 ha.), triangular in shape. Cocos Park incorporates part of the Spearwood ridges. On-site investigation showed that it is underlain by yellow quartz sand. The natural vegetation cover is the Karrakatta Complex-central and south (Hedde et al 1978), and comprises open forest (*E. marginata*, *E. calophylla*, *B. menziesii*, *B. attenuata*, *B. ilicifolia*, *Allocasuarina fraseriana*). A species list for the reserve is in Table 6. The vegetation is in good condition.

From information collected during this study, the functions of the reserve are cultural and ecological. They are:

1. to maintain a representative example of an uncommon type of vegetation in an undisturbed state, and
2. to provide an important refuge site and sources of food to avifauna in the Perth Metropolitan area.

RESERVE #13 -SHERBROOKE GARDENS RESERVE

The area of reserved remnant vegetation is located on the corner of Phoenix Road and Sudlow Road at Bibra Lake. It is a microscale area (approximately 2.5 ha.), triangular in shape. Sherbrooke Gardens incorporates part of the Spearwood ridges. From on-site investigation it is underlain by yellow quartz sand. The natural vegetation cover is the Cottesloe Complex-central and south (Hedde et al 1978), and contains open forest (*E. gomphocephala*, *C. calophylla*, *B. grandis*, *B. attenuata*). A species list for the reserve is in Table 7. The vegetation is in good condition.

From information collected during this study, the functions of the reserve are cultural and social. They are:

1. to maintain a representative example of an uncommon type of vegetation in an undisturbed state
2. to provide an important buffer zone and aesthetic area between a residential and industrial estate and its heavily used access routes (e.g., Phoenix Road).
3. to provide an area of accessible remnant endemic natural bushland as an informal educational resource for the local community; familiarity with local flora and fauna often results in the development of respect for these habitats and an increased awareness of their values.

RESERVE #14 -MANNING RESERVE UPLAND

The area is located north of Azelia Road at Hamilton Hill. It is a mesoscale area (approximately 25 ha.), rectangular in shape. The Manning upland reserve incorporates part of the Spearwood ridges. It is an undulating hilly area incorporating several geomorphic units: swales, high and low dune ridges, and wetlands. The reserve is underlain by Tamala limestone and shallow brown sands. The natural vegetation cover of the uplands belongs to the Cottesloe Complex-central and south (Hedde et al 1978). It forms a mosaic of five different assemblages: open woodland (*E. gomphocephala*), open low forest (*E. decipiens*), closed scrub (*Acacia rostellifera*, *M. huegelii*), closed heath (*Dryandra sessilis*) and closed heath (*Melaleuca acerosa*,

Melaleuca huegelii, *Lomandra maritima*). A species list for the reserve is in Table 8. The condition of the vegetation varies from good to poor (Figure 6).

Fig 5

TABLE 5 List of exotic species in Holdsworth Park Reserve

Weeds

CUCURBITACEAE

**Citrullus lanatus*

IRIDACEAE

**Gladiolus caryophyllaceus*

MYRTACEAE

**Leptospermum laevigatum*

POACEAE

Avena barbata*Cynodon dactylon***Ehrharta calycina*

TABLE 6 Species list for Cocos Park

Indigenous taxa

CASUARINACEAE

Allocasuarina fraseriana

CYPERACEAE

Mesomelaena pseudostygia

DILLENIACEAE

Hibbertia hypericoidesi

MYRTACEAE

*Eucalyptus marginata**Hypocalymma angustifolium*

PAPILIONACEAE

*Daviesia divaricata**Hardenbergia comptoniana**Nemcia capitata*

PHORMICACEAE

Dianella revoluta

PROTEACEAE

*Banksia attenuata**Banksia ilicifolia**Banksia grandis**Banksia menziesii**Petrophile linearis*

RESTIONACEAE

THYMELIACEAE

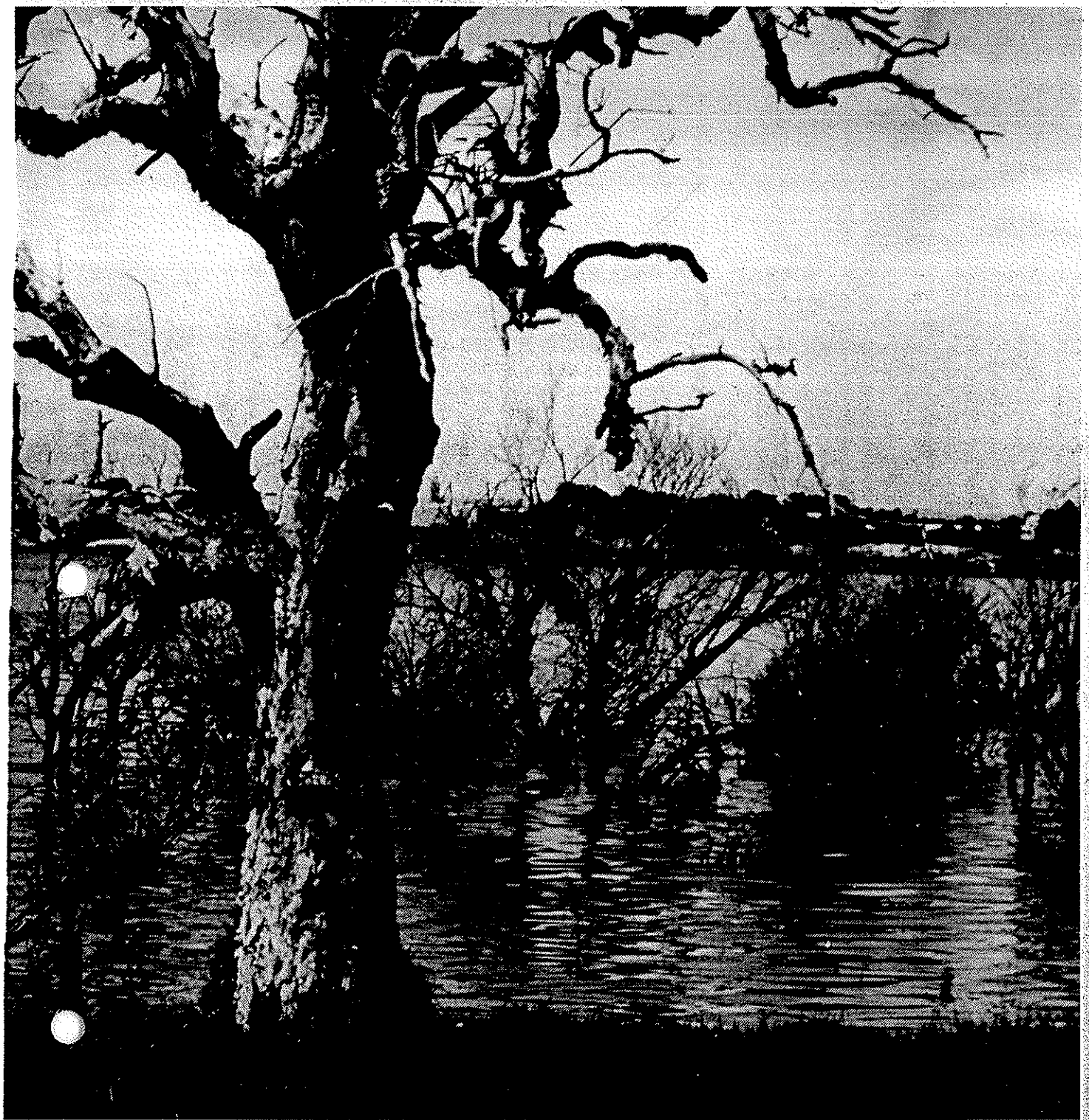
Pimelia sp

XANTHORRHOEACEAE

Xanthorrhoea preissii

ZAMIACEAE

Macrozamia reedlei



Management Proposal for Yangebup Lake

Students of N319 Environmental Management
Murdoch University. May 1988

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(941.1)
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BS 256

BUSSEY IS

YANGEBUP.

DRAFT MANAGEMENT PROPOSAL FOR YANGEBUP LAKE

Students of N319 Environmental Management

Murdoch University

May, 1988

ENVIRONMENTAL PROTECTION AUTHORITY
1 MURDOCH STREET, PERTH

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trees can tolerate winter flooding but the roots must be above the water table during summer. This waterlogging may also be contributing to the mortality of tuarts upslope of the littoral community at Yangebup (see Section 4).

Chittleborough (1980) showed that trampling can have a severe effect on the integrity of native vegetation communities. Trampling causes an increased loss of soil litter, an integral part of the woodland nutrient cycle, as well as increasing the amount of heat and light reaching ground species. Plants not adapted to high temperatures and high light intensities may suffer, as well as those species susceptible to physical damage.

Trampling damage by humans and horses is evident near a number of tracks used as bridle paths in the study area, as well as frequently used footpaths.

3.4 Fauna

A suite of fauna currently exists in the Yangebup Lake area. Comprehensive species lists appear in Appendices B-E. As with the vegetation, both indigenous and introduced elements are present, with the latter category well represented in the mammals.

In comparison with the best-preserved wetland areas on the Swan Coastal Plain, the Yangebup Lake area supports a somewhat impoverished fauna. Nevertheless, significant populations of several species make use of the lacustrine habitats and the bush surrounds. Their conservation and social values must be considered in the management plan for the area.

3.4.1 Birds

The Swan Coastal Plain plays a significant part in the life cycle of many Western Australian birds. It offers the only

APPENDIX A PLANT SPECIES AROUND YANGETUP LAKE

Species list of plants (September 1987) from occasional transects in Yangebup Lake area.

(* indicates exotic species)

- | | |
|---------------------------------|----------------------------------|
| <i>Acacia pulchella</i> | <i>Hakea sp.</i> |
| <i>A. saligna</i> | <i>Hibbertia hypericoides</i> |
| <i>Allocasuarina fraseriana</i> | <i>H. racemosa</i> |
| <i>Anigozanthos humilis</i> | * <i>Homeria breyniana</i> |
| <i>A. manglesii</i> | <i>Hovea trisperma</i> |
| <i>Aortis procumbens</i> | <i>Hypocalymma robustum</i> |
| * <i>Arctotheca calendula</i> | <i>Hypochoeris radicata</i> |
| * <i>Avena fatua</i> | |
| * <i>Azolla filiculoides</i> | |
| | <i>Jacksonia furcellata</i> |
| <i>B. attenuata</i> | <i>J. sternbergiana</i> |
| <i>B. grandis</i> | <i>Juncus pallidus</i> |
| <i>B. ilicifolia</i> | |
| <i>B. menziesii</i> | <i>Kennedia prostrata</i> |
| <i>B. littoralis</i> | |
| <i>Bromus diandrus</i> | <i>Leptospermum laevigatum</i> |
| <i>Burchardia umbellata</i> | * <i>Lupinus consentini</i> |
| | |
| * <i>Carpobrotus edulis</i> | <i>Macrozamia riedlei</i> |
| <i>Conostylis aculeata</i> | <i>Melaleuca raphiophylla</i> |
| | <i>Mesomelaena sp.</i> |
| <i>Daviesia divaricata</i> | |
| <i>Daviesia sp.</i> | <i>Patersonia occidentalis</i> |
| <i>Dodonaea aptera</i> | * <i>Pennisetum clandestinum</i> |
| | <i>Peterophile linearis</i> |
| * <i>Ehrharta calycina</i> | <i>Pimelia rosea</i> |
| <i>E. longifolia</i> | <i>Podolepis gracilis</i> |
| <i>Eucalyptus calophylla</i> | <i>Phytolacca octandra</i> |
| <i>E. gomphocephala</i> | |
| <i>E. marginata</i> | * <i>Ricinis communis</i> |
| <i>E. rudis</i> | |
| * <i>Euphorbia sp.</i> | <i>Typha orientalis</i> |
| | |
| <i>Gompholobium tomentosum</i> | * <i>Watsonia sp.</i> |
| <i>Grevillea sp.</i> | <i>Xanthorrhoea preissii</i> |
| | * <i>Zantedeschia aethiopica</i> |

APPENDIX B AQUATIC INVERTEBRATES OF YANGEBUP LAKE

Dr J Davis' 1987 Wetland Ecology Student Project group identified the following aquatic invertebrates at Yangebup Lake.

Nematoda

Nematode sp.

Arthropoda

Arachnida

Order Acarina

Acercella falcipes

Eylais sp.

Crustacea

Subclass Ostracoda

Candonocypris novaezealandiae

Sarscypridopsis aculeata

Ostracod sp.

Subclass Copepoda

Order Cyclopoida

Cyclopoid sp.

Insecta

Order Diptera

Family Ceratopogonidae

Ceratopogonid sp.

Family Chironomidae

Chironomus australis

Polypedilum nubifer

Procladius villosimanus

Order Hemiptera

Family Corixidae

Agraptocorixa hirtifrons

Micronecta robusta

Family Notonectidae

Anisops sp.

Order Odonata

Zygoptera sp.

Order Trichoptera

Triplectides australis

Mollusca

Mollusc sp.

APPENDIX C BIRD SPECIES RECORDED AT YANGETUP LAKE (1986)
(RAOU, unpublished data)

Podicipedidae (Grebes)

- Poliiocephalus poliocephalus* (Hoary-headed Grebe)
Tachybaptus novaehollandiae (Australian Grebe)

Phalacrocoracidae (Cormorants)

- Phalacrocorax carbo* (GREAT CORMORANT)

Ardeidae (Herons, Egrets)

- Ardea novaehollandiae* (White-faced Heron)
Egretta alba (Great Egret)
Nycticorax caledonicus (Rufous Night Heron)

Plataleidae (Ibis)

- Threskiornis aethiopica* (Sacred Ibis)
T. spinicollis (Straw-necked Ibis)

Anatidae (Ducks, Swans)

- Cygnus atratus* (Black Swan)
Tadorna tadornoides (Australian Shelduck)
Anas Superciliosa (Pacific Black Duck)
A. gibberifrons (Grey teal)
A. rhynchotis (Australasian shoveller)
Malacorhynchus membranaceus (Pink-eared Duck)
Aythya australis (Hardhead)
Oxyura australis (Blue-billed Duck)
Biziura lobata (Blue-billed Duck)

Accipitridae (Harriers)

- Circus aeruginosus* (March Harrier)

Rallidae (Hens, coots)

- Gallinula tenebrosa* (Dusky Moorhen)
Porphyrio porphyrio (Purple Swamphen)
Fulica atra australis (Eurasian Coot)

Charadriidae (Plovers, Dotterels)

- Charadrius melanops* (Black-fronted Plover)

Recurvirostridae (Stilts)

- Himantopus himantopus* (Black-winged Stilt)

Scolopacidae (Stints)

Calidris ruficollis (Red-necked Stint)

Laridae (Gulls)

Larus novaehollandiae (Silver Gull)

Chlidonias hybrid (Whiskered Turn)

Sylviidae (Warblers, Grass-birds)

Acrocephalus stentoreus (Clamorous Reed-Warbler)

Megalurus gramineus (Little Grassbird)

APPENDIX D REPTILES AND AMPHIBIANS OF THE YANGETUP
LAKE AREA

The following reptile and amphibian list is based on data gathered by D. Mead-Hunder (unpublished data).

Snakes

Elapidae

Notechis scutatus occidentalis (tiger snake)

Pseudonaja affinis (dugite)

Vermicella bertholdi

Typhlopidae

Ramphlotyphlops australis (blind snake)

Lizards

Agamidae

Pogona minor (bearded dragon)

Gekkonidae

Phyllodactylus marmoratus

Pygopodidae

Aprasia repens

Delma fraseri

Lialis burtonis (Burton's snake lizard)

Scincidae

Cryptoblepharus plagiocephalus

Ctenotus lesueurii

Hemiergus peronii quadrilineata

Leiopisma trilineatum

Lerista elegans

Menetia greyii

Morethia lineocellata

M. obscura

Tiliqua rugosa (bob-tail skink)

Varanidae

Varanus gouldii (Gould's goanna)

V. tristis

Frogs

Hylidae

Litoria adelaidensis

L. moorei

Leptodactylidae

Heleiopous eyrei (moaning frog)

Limnodynastes dorsalis (pobblebonk)

Ranidella glauerti

R. insignifera

Tortoise

Chelodina oblonga

APPENDIX E

MAMMALS OF THE YANGEBUP LAKE AREA

The following list of mammals was kindly provided by L. Thomas and D. Mead-Hunter (unpublished data).

Indigenous Mammals

Chiropteran sp. (bat)
Isoodon obselus (short-nosed bandicoot)
Trichosurus vulpecula (brush-tail possum)

Introduced Mammals

Canis familiaris (dog)
Felis catus (cat)
Mus musculus (house mouse)
Oryctolagus cuniculus (rabbit)
Rattus norvegicus (brown rat)
Rattus rattus (black rat)
Vulpes vulpes (fox)

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Bas

Part Report:

Value identification
not objection
assessment section

(Contact Heritage
Commission, Melinda
Brown for complete

**Objection Assessment of the
values of the vegetation and flora of the report)** 13/5/96
Beeliar Wetlands



Alogyne huegelii var. *glabrescens* to the west of Manning Lake

Prepared for the Australian Heritage Commission

by Bronwen Keighery, Consultant Botanist
November 1995 and February 1996

Table 2: Bushland Areas listed on the National Estate or being considered for listing.
Bushland Areas listed/interim listed on the National Estate

Bushland Area	Area (ha)	Native Flora	Flor. Com ¹⁰	Veg. Assoc#.	Veg. Comp. 18
✓ Hepburn Heights/Pinnaroo	90	230* ¹ ✓	3*	19 ¹¹	3
✓ Trigg/Karrinyup Reserves	120	175 ² ✓	4		2
✓ Banksia Road Nature Reserve	33	150 ³ ✓	3		1
✓ Marangaroo (Res 20091)	30*	130 * ⁴ ✓	1		1
✓ Neerabup National Park	1,111	242 ⁵ ✓	2		?2
✓ Star Swamp	100	191 ⁶ ✓	3	13 ¹¹	?2
✓ Woodvale Nature Reserve	44	170 ⁷ ✓	1		1
Beeliar Wetlands	2700	406 ²²	7	31 ¹⁸	4
✓ Thompsons Lake NR	509	199 ¹⁴ ✓		15 ¹⁴ 12 ¹⁸	3
✓ Baganup Lake	254	279 ¹⁵ ✗	4	10 ¹⁵	3
Murdoch University	?	200 ¹³		5 ¹³	2
✓ Yangebup Lake	103*	140 ¹⁶ ✓		5 ¹⁶ 7 ¹⁸	2
✓ Piney Lake	68	96 ¹⁰ ✓		6 ¹⁰	1
✓ Booragoon Lake	13	34 ¹² ✓		3 ¹²	1
✓ Market Garden Lake	38	21 ¹⁷ ✓		7 ¹⁷	1

Unlisted areas subject to current nominations

✓ Kings Park	400	290 ²⁰ ✓	1	5 ²⁰	1
✓ Bold Park	221	221 ²¹ ✓	4		3
✓ M91	56	86 ²³ ✓	2		1

these are not directly compatible as they are based on variety of approaches to describing vegetation associations

* estimate of area, flora or floristic community types

1 estimate based on Keighery (1991), Tingay (1991), Foulds (1988) and AHC Listing Document

2+ G. Keighery pers. comm.

3+ G. Keighery pers. comm.

4 estimate from knowledge of the area

5+ G. Keighery pers. comm.

6 Bell *et al.* (1984)

7 Keighery and Langley (1994)

8 Gibson *et al.* (1994) and System 6 Update

9 Tingay (1991)

10 Rodda (1986)

11 Weston and Clay (1980)

12 Smith (1985)

13 Dell and Bennett (1986)

14 Crook and Evans (1981)

15 Clay (1986)

16 Ecoscape (1994)

17 Ecoscape (1995)

18 Newman *et al.* (1976)

19 Heddle *et al.* (1980)

20 Bennet in Kings Park Bushland Draft Management Plan (1993)

21 Keighery, Harvey and Keighery (1991)

22 Appendix Flora

23 Keighery and Keighery 1993

+ Reserve flora lists for bushland areas on the Swan Coastal Plain are being compiled by G.J. Keighery with assistance from B.J. Keighery and N. Gibson to establish a better knowledge of the flora of these areas and to address species conservation status for the Swan Coastal Plain.

Table 3: Floristic Community Types found in the study area

Each site is located Map 1. Study site codes refer to the following areas:

- Thom - Thomson Lake Nature Reserve (Gibson *et al.* 1994)
 Harry - Banganup Lake and adjacent bushland, Harry Waring Marsupial Reserve
 or Jandakot Research Station (Gibson *et al.* 1994)
 MTB - Lakes Mount Brown and Brownman Swamps and adjacent bushland (Gibson *et al.* 1994)
 NAVB - M 91 (Gibson *et al.* 1994)
 Beel - 1 & 2 North Lake and adjacent bushland (System 6 Update 1995)
 - 3 Murdoch University

Floristic Community Type (site)	Generalised Description	Predominant Landform Type (after Churchward and McArthur 1980)
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Wetland Super Group

5 (Map 2a) Harry 3	Mixed shrub damplands Mean species richness per site: 38.4 Av.Cond: 2.1, Cons status: Low risk	Bassendean/Pinjarra
11 (Map 2a) Harry 6 Beel 3	Wet forests and woodlands Mean species richness per site: 27.2 Av.Cond: 2.7, Cons status: Low risk	Bassendean/Pinjarra
16 (Map 2a) *NAVB 1	Highly saline seasonal wetlands Mean species richness per site: 13.5 Av.Cond: 2.9, Cons status: Vulnerable	coastal and esturine
17 (Map 2a) MTB 05	<i>Melaleuca raphiophylla</i> - <i>Ghania trifida</i> seasonal wetlands Mean species richness per site: 13.6 Av.Cond: 2.3, Cons status: Low risk	Quindalup/ Spearwood

Bassendean Dune Super Group

21a (Map 2b) Harry 05	Central <i>Banksia attenuata</i> - <i>E. marginata</i> woodlands Mean species richness per site: 54.6 Av.Cond: 2.5, Cons status: Low risk	Bassendean/ Spearwood
23a Map 2b) Harry 04 #Beel 02	Central <i>Banksia attenuata</i> - <i>B.menziesii</i> woodlands Mean species richness per site: 62.8 Av.Cond: 2, Cons status: Low risk	Bassendean

Spearwood/Quindalup Dune Super Group

24 (Map 2b) Thom 02 MTB 1, 2, 3 & 4 *NAVB3 &4	Northern Spearwood shrublands and woodlands Mean species richness per site: 41.8 Av.Cond: 3, Cons status: Susceptible	Spearwood
28 (Map 2b) #Beel 1 Harry 1 & 2	Spearwood <i>Banksia attenuata</i> or <i>Banksia attenuata</i> - <i>Eucalyptus</i> woodlands Mean species richness per site: 55.2 Av.Cond: 2.5, Cons status: Low risk	Spearwood
29a (Map 2b) *NAVB 2	Coastal shrublands on shallow sands Mean species richness per site: 40.7 Av.Cond: 2.3, Cons status: Susceptible	Quindalup

Appendix 1

This list was compiled from a series of published and unpublished lists for the study area. The principle references are cited in the key to column 4. Records were also extracted from the text of Environmental Science Murdoch University (1986) and Newman et al (1980). As most of these lists date from the 1980's there was a need to update the nomenclature.

Some additions have also been made from field visits in October and November 1995 for this study.

Key

Column 1: Taxon

Taxa are listed alphabetically in family, genera and species. Nomenclature is after Gibson *et al.* (1994). A * preceding a the genus name indicate a non-native taxon, these may be naturalised taxa or planted taxa.

Column 2: Priority Code (Department of Conservation and Land Management 1995)

Column 3: Geographical Range/Significant Taxa

N = Populations at the northern limit of their known range

S = Populations at the southern limit of their known range

W = Populations at the western limit of their known range

Geographic Limit - Location of limits as defined above.

= Significant taxa (see Sections 3.3.1 and 3.4.1.2 for details of significance)

Column 4: Areas

P Piney Lake Reserve (Rodda 1986)

Ba Banganup Lake (Weston and Clay 1980)

Bo Booragoon (Lake Smith 1985)

M Murdoch University (Dell and Bennett 1986)

T Thompson's Lake Nature Reserve (Crook and Evans 1981)

S The Spectacles (Clay 1986)

Y Yangebup Lake (Ecoscape 1994)

Ma Manning Lake (this report)

MG Market Garden Swamps (Ecoscape 1995)

MB Floristic Database for Swan Coastal Plain (Gibson *et al.* 1994) and System 6 Update

F Floristic Database for Swan Coastal Plain (Gibson *et al.* 1994) and System 6 Update.

91 System 6 area M91 (Keighery and Keighery 1993)

Taxon	Prio Code	Geographic Range	Recorded Areas	29
Aizoaceae				
*Carpobrotus aquilaterale			P, Ba, T, S	
*Carpobrotus edulis			Ba, Bo, M, T, Y, F, 91	
Carpobrotus virescens			91	
Carpobrotus virescens X edulis			91	
*Tetragonia decumbens			F, 91	
Amaranthaceae				
Ptilotus drummondii			Ba, T, Y, 91	
Ptilotus manglesii			P	
Ptilotus polystachyus			M, Y	
Anredaceae				
*Anredera cordifolia			MG	
Anthericaceae				
Amocrinum preissii			Ba, T, Y	
Caesia micrantha			Ba, M, T	
Caesia occidentalis			F	
Chamaescilla corymbosa			Ba, M, T, S, F	
Corynotheca micrantha			Ba, M, T, S, Y	
Dichopogon capillipes			Ba, T, Y, F	
Laxmannia ramosa			Ba	
Laxmannia squarrosa			P, Ba, T, M, F	
Sowerbaea laxiflora			P, Ba, M, T, S, Y, F	
Thysanotus arenarius			Y	
Thysanotus asper			M	
Thysanotus manglesianus/patersonii complex			P, Ba, T, Y, F, 91	
Thysanotus multiflorus			M	
Thysanotus sparteus			Ba, T, Y, F	
Thysanotus thyrsoideus			F	
Thysanotus triandrus			Ba, M, Y, F	
Tricoryne elatior			Ba, Bo, M, T, S, Y	
Tricoryne tenella			F	
Amaryllidaceae				
*Narcissus tazetta				
Apiaceae				
Apium annuum			F, 91	
Apium prostratum			F	
Centella cordifolia			Ba, Bo, M, T, S, Y	
Daucus glochidiatus			F, 91	

Taxon	Prio Code	Geographic Range	Recorded Areas	30
<i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			Ba, M, T, Y, F	
* <i>Foeniculum vulgare</i>			T, Y, Mg, Ma, 91	
<i>Homalosciadium homalocarpum</i>			Ba, Y, F	
<i>Hydrocotyle diantha</i>			F	
<i>Hydrocotyle scutellifera</i>			F	
<i>Platysace compressa</i>			Ba, M, T, F	
<i>Trachymene pilosa</i>			M, Y, F	
<i>Xanthosia huegelii</i>			Ba, M, , S, Y, F	
Araceae				
* <i>Zantedeschia aethiopica</i>			S, Y, H, MG, F	
Asclepidaceae				
* <i>Gomphocarpus fruticosus</i>			MG	
Asparagaceae				
* <i>Myrsiphyllum asparagoides</i>			Ma	
Asphodelaceae				
* <i>Asphodelus fistulosus</i>			Ba, M, T, 91	
* <i>Trachyandra divaricata</i>			91	
Asteraceae				
* <i>Arctotheca calendula</i>			Ba, T, S, Y, 91	
* <i>Aster subulatus</i>			Ba, T, F	
<i>Asteridea pulverulenta</i>			Ba, Y	
<i>Brachyscome iberidifolia</i>			Ba, M	
* <i>Carduus pycnocephalus</i>			Ba	
* <i>Centaurea melitensis</i>			Ba, F, 91	
* <i>Cirsium vulgare</i>			Ba, MG, 91	
* <i>Conyza albida</i>			F, 91	
* <i>Conyza bonariensis</i>			Bo, F, 91	
<i>Cotula coronopifolia</i>			Ma	
* <i>Dittrichia graveolens</i>			MG, 91	
* <i>Helianthus annua</i>			MG	
<i>Helichrysum cordatum</i>			M, 91	
<i>Hyalosperma cotula</i>			Ba, T, F, 91	
* <i>Hypochoeris glabra</i>			Ba, Bo, S, Y, MG, F, 9	
<i>Ixiolaena viscosa</i>	N	North Lake	Bi, N, F	
* <i>Lactuca serriola</i>			Y, F	
<i>Lagenifera huegelii</i>			Ba, S, Y, F	
<i>Millotia myosotidifolia</i>			Ba, M, t	
<i>Millotia tenuifolia</i>			F	

Taxon	Prio Code	Geographic Range	Recorded Areas	31
<i>Olearia axillaris</i>			Ba, M, T, F, 91	
<i>Olearia elaeophila</i>			Y	
<i>Pithocarpa corymbulosa</i>			Y	
<i>Podolepis canescens</i>			Ba, T	
<i>Podolepis gracilis</i>			Ba, M, T, Y, F	
<i>Podotheca angustifolia</i>			Y, F	
<i>Podotheca chrysantha</i>			Ba, M, T, F	
<i>Podotheca gnaphalioides</i>			P	
<i>Pseudognaphalium luteoalbum</i>			Ba, F	
<i>Quinetia urvillei</i>			Y, F	
<i>Senecio hispidulus</i>			Ba, T	
<i>Senecio lautus</i>			Ba, M, T, Y, F, 91	
<i>Siloxerus humifusus</i>			Ba, M, F	
* <i>Solidago canadensis</i>			MG	
* <i>Sonchus asper</i>			Ba, M, F, 91	
<i>Sonchus hydrophilus</i>			F, 91	
* <i>Sonchus oleraceus</i>			F, 91	
* <i>Taraxacum officinale</i>			MG	
* <i>Urospermum picroides</i>			F, 91	
* <i>Ursinia anthemoides</i>			Ba, S, Y, F	
* <i>Vellereophyton dealbatum</i>			Ba, T, F, 91	
<i>Waitzia citrina</i>			T, F	
<i>Waitzia suaveolens</i>			F	
Azollaceae				
<i>Azolla filiculoides</i>			Y, H	
Brassicaceae				
* <i>Brassica oxyrrhina</i>			Y	
* <i>Brassica tournefortii</i>			Ba, MG, F, 91	
* <i>Heliophila pusilla</i>			Ba, F, 91	
* <i>Lobularia maritima</i>			MG	
* <i>Sisymbrium orientale</i>			MG	
* <i>Raphanus raphanistrum</i>			BO, MG	
* <i>Rorippa naturtium-aquaticm</i>			Ba, T	
Callitrichaceae				
* <i>Callitriche stagnalis</i>			Ba	
Campanulaceae				
* <i>Wahlenbergia capensis</i>			Ba, Y	
<i>Wahlenbergia preissii</i>			Ba, F	

Taxon	Prio Code	Geographic Range	Recorded Areas	32
Cannaceae				
* <i>Canna generalis</i>			MG	
* <i>Canna ochroides</i>			MG	
Caryophyllaceae				
* <i>Arenaria serpyllifolia</i>			F	
* <i>Cerastium glomeratum</i>			Ba, F	
* <i>Minuartia hybrida</i>			F, 91	
* <i>Petrorhagia velutina</i>			Ba, T, Y, 91	
* <i>Sagina apetala</i>			Ba, F	
* <i>Sagina maritima</i>			F, 91	
* <i>Silene gallica</i>			Ba, T, Y, F, 91	
* <i>Stellaria media</i>			Ba, F, 91	
Casuarinaceae				
<i>Allocasuarina fraseriana</i>			P, Ba, M,, T, S, Y, F	
<i>Allocasuarina humilis</i>			P, Ba, M,, T, S, F, 91	
Centrolepidaceae				
<i>Centrolepis aristata</i>			Ba	
<i>Centrolepis drummondiana</i>			Ba, T, Y, F	
Chenopodiaceae				
<i>Atriplex cinerea</i>			F, 91	
<i>Atriplex hypoleuca</i>			Ma	
* <i>Atriplex prostrata</i>			T	
* <i>Chenopodium album</i>			MG	
* <i>Chenopodium ambrosioides</i>			Ba, T	
* <i>Chenopodium murale</i>			91	
<i>Chenopodium pumilio</i>	N	Balangup L	Ba	
<i>Rhagodia baccata</i>			F	
<i>Rhagodia baccata</i> subsp. <i>baccata</i>			91	
# <i>Rhagodia baccata</i> subsp. <i>dioica</i>			91	
<i>Sarcocornia quinqueflora</i>			MG, Ma, F, 91	
<i>Suaeda australis</i>			MG, 91	
<i>Threlkeldia diffusa</i>			F, 91	
Colchicaceae				
<i>Burchardia congesta</i>			P, Ba, Bo, M,, T, S, Y, F	
Commelinaceae				
<i>Cartonema philydroides</i>			Ba, M, T	
* <i>Tradescantia fluminense</i>			Bo	

Taxon	Prio Code	Geographic Range	Recorded Areas	33
Convolvulaceae				
# <i>Wilsonia backhousei</i>			91	
# <i>Wilsonia humilis</i>			91	
Crassulaceae				
<i>Crassula colorata</i>			P, Ba, Y, F, 91	
<i>Crassula exserta</i>			F, 91	
* <i>Crassula glomerata</i>			Ma, F, 91	
<i>Crassula pedicellosa</i>			F	
Cucurbitaceae				
* <i>Citrullus lanatus</i>			MG	
* <i>Cucumis myriocarpus</i>			S, MG	
Cuscutaceae				
* <i>Cuscuta epithymum</i>			Ba	
Cyperaceae				
<i>Baumea arthrophylla</i>			Ba, T	
<i>Baumea articulata</i>			P, Ba, M, T, S, F	
<i>Baumea juncea</i>			T, Y, F	
<i>Baumea preissi</i>			Ba, T	
<i>Baumea riparia</i>			Ba, T	
<i>Baumea rubigenosa</i>			Ba, T	
<i>Bolboschoenus caldwellii</i>			Ba, T, MG	
<i>Carex preissii</i>			F	
* <i>Cyperus congestus</i>			Ba, T, S, Y, MG	
* <i>Cyperus eragrostis</i>			Y	
<i>Cyperus polystachyos</i>			Ba, T	
* <i>Cyperus rotundus</i>			Bo, MG	
* <i>Cyperus tenellus</i>			P	
* <i>Cyperus tenuiflora</i>			Bo, M	
# <i>Eleocharis sphacelata</i>			K	
# <i>Fimbristylis vilata</i>			M, S	
<i>Gahnia trifida</i>			Ma, MG, F, MB	
<i>Isolepis cernua</i>			F, 91	
<i>Isolepis marginata</i>			Ba, T, F	
<i>Lepidosperma angustatum</i>			M, S, Y, F, 91	
<i>Lepidosperma costale</i>			Ba, T	
<i>Lepidosperma drummondii</i>			M	
# <i>Lepidosperma gracile</i>			M	
<i>Lepidosperma longitudinale</i>			Ba, Bo, M, T, S, F	

Taxon	Prio Code	Geographic Range	Recorded Areas	34
<i>Lepidosperma scabrum</i>			Ba, T, S	
<i>Lepidosperma</i> sp. (Coastal terete BJK & NG 231)			F	
<i>Lepidosperma tenue</i>			M, S	
<i>Lepidosperma squamatum</i>			Y, F	
<i>Mesomelaena pseudostygia</i>			P, Ba, M, T, S, Y, F	
<i>Mesomelaena tetragona</i>			P	
<i>Schoenus aff. laevigatus</i>			F	
<i>Schoenus brevisetis</i>			F	
<i>Schoenus brevifolius</i>			Ba, T	
<i>Schoenus clandestinus</i>			Ba, Y, F	
<i>Schoenus curvifolius</i>			Ba, M, T, S, Y, F	
<i>Schoenus grandiflorus</i>			Ba, T, S, Y, 91	
<i>Schoenus rodwayanus</i>			F	
<i>Schoenus subflavus</i>			Ba, T	
<i>Tetraria octandra</i>			P, M, Y, F	
Dasypogonaceae				
<i>Acanthocarpus preissii</i>			F, 91	
<i>Calectasia cyanea</i>			Ba, M, T, S	
<i>Dasypogon bromeliifolius</i>			P, Ba, M, T, S, F	
<i>Lomandra caespitosa</i>			F	
<i>Lomandra hermaphrodita</i>			F	
<i>Lomandra integra</i>			M	
<i>Lomandra maritima</i>			Ma, F, 91	
<i>Lomandra micrantha</i>			Ba	
<i>Lomandra nigricans</i>			Ba, T, F	
<i>Lomandra preissii</i>			F	
<i>Lomandra suaveolens</i>			Ba, M, F	
Dennstaedtiaceae				
<i>Pteridium esculentum</i>			Bo, T, S, P, H, N	
Dilleniaceae				
<i>Hibbertia acerosa</i>			91	
<i>Hibbertia huegelii</i>			Ba, M, T, Y, F	
<i>Hibbertia hypericoides</i>			P, Ba, M, T, S, Y, Ma F, 91	
<i>Hibbertia racemosa</i>			P, Ba, M, T, S, Y, F, 91	
<i>Hibbertia spicata</i> subsp. <i>leptotheca</i>	3	S	Yalgorup	F, 91
<i>Hibbertia stellaris</i>			P, M	
<i>Hibbertia subvaginata</i>			M, T, F	

Taxon	Prio Code	Geographic Range	Recorded Areas	35
Droseraceae				
<i>Drosera erythrorhiza</i>			Ba, M, T, S, Y, F	
<i>Drosera gigantea</i> subsp. <i>gigantea</i>			P	
<i>Drosera glanduligera</i>			Ba, M, T	
<i>Drosera macrantha</i>			Ba, M, T, S, F	
<i>Drosera menziesii</i> subsp. <i>penicillaris</i>			P, Ba, M, T, F	
<i>Drosera paleacea</i>			Ba, M, Y, F	
<i>Drosera pallida</i>			Ba, M, Y, F	
<i>Drosera stolonifera</i>			M, Y, F	
Epacridaceae				
<i>Acrotriche cordata</i>			91	
<i>Astroloma pallidum</i>			Ba, M, T, S, Y, F	
<i>Brachyloma preissii</i>			Ba, M, F	
<i>Conostephium pendulum</i>			P, T, S, Y, F	
<i>Conostephium preissii</i>			Ba, M, T, Y	
<i>Leucopogon australis</i>			P, M, 91	
<i>Leucopogon conostephioides</i>			Ba, M, T, Y	
<i>Leucopogon gracillimus</i>			F	
<i>Leucopogon oxycedrus</i>			Ba	
<i>Leucopogon parviflorus</i>			M, Ma, F	
<i>Leucopogon propinquus</i>			Ba, Bo, M, T, S, Y, F	
<i>Leucopogon racemosus</i>			M, F	
<i>Lysinema ciliatum</i>			P, Ba, M, T, S	
Euphorbiaceae				
* <i>Euphorbia peplus</i>			Ba, T, Y, Ma, MG, F, 91	
* <i>Euphorbia terracina</i>			Y, Ma, 91	
<i>Monotaxis grandiflora</i>			P, Ba, M	
<i>Monotaxis occidentalis</i>			Ba, Y	
<i>Phyllanthus calycinus</i>			Ba, M, T, S, Ma, F, 91	
<i>Poranthera microphylla</i>			Ba, F	
* <i>Ricinus communis</i>			Y, MG	
Fagaceae				
* <i>Quercus suberus</i>			P	
* <i>Quercus</i> sp.			S	
Frankeniaceae				
<i>Frankenia pauciflora</i>			91	
Fumariaceae				
* <i>Fumaria capreolata</i>			Ba, T	

Taxon	Prio Code	Geographic Range	Recorded Areas	36
* <i>Fumaria muralis</i>			Ba, T	
Gentianaceae				
* <i>Centaurium erythraea</i>			F	
* <i>Centaurium spicatum</i>			Ba	
Geraniaceae				
* <i>Erodium botrys</i>			Ba, T	
* <i>Erodium cicutarium</i>			Ba, T, F, 91	
* <i>Geranium molle</i>			Ba, T, F, 91	
* <i>Pelargonium capitatum</i>			P, T, S, Ma, MG, F, 91	
* <i>Pelargonium domesticum</i>			Bo	
<i>Pelargonium littorale</i>			F	
Goodeniaceae				
<i>Dampiera linearis</i>			P, Ba, M, T, S, F	
# <i>Dampiera triloba</i>			M	
<i>Goodenia ?pulchella</i>			Ba, M, T	
# <i>Lechenaultia biloba</i>		W	M	
<i>Lechenaultia expansa</i>			Ba, T	
<i>Lechenaultia floribunda</i>			P, M, S, Y	
<i>Lechenaultia linarioides</i>		S	Spectacle S	
<i>Scaevola canescens</i>			Ba, M, T, S, Y	
<i>Scaevola crassifolia</i>			91	
<i>Scaevola globulifera</i>			M	
<i>Scaevola repens</i>			M, Y	
Haemodoraceae				
<i>Anigozanthos humilis</i>			P, Ba, M, T, S, Y, F	
<i>Anigozanthos manglesii</i>			P, Ba, M, T, S, Y	
<i>Anigozanthos viridis</i>			T	
<i>Conostylis aculeata</i>			P, Ba, M, T, S, Y, F, 91	
<i>Conostylis candicans</i>			P, M, T, F	
<i>Conostylis setigera</i>			P, Ba, M, T, Y, F	
<i>Haemodorum paniculatum</i>			Ba, M, T, Y	
<i>Haemodorum spicatum</i>			Ba, Bo, T, Y	
<i>Phlebocarya ciliata</i>			P, Ba, M, T, S, F	
<i>Tribonanthes ?uniflora</i>			P	
Gyrostemonaceae				
<i>Tersonia cyathiflora</i>			MB	
Haloragaceae				
<i>Glischrocaryon aureum</i>			Ba	

Taxon	Erio Code	Geographic Range	Recorded Areas	37
Gonocarpus cordiger			Ba	
Gonocarpus pithyoides			F	
Myriophyllum crispatum			Ba	
Myriophyllum integrifolia			Ba	
Iridaceae				
* Chasmanthe floribunda			S	
* Gladiolus caryophyllaceus			P, Ba, M, T, S, Y, F, 91	
* Homeria flaccida			Ba, Y, F, 91	
* Ixia paniculata			Ba	
Patersonia occidentalis			P, Ba, M, T, S, Y, F	
Patersonia occidentalis (swamp form)			N	
* Rcmulea rosea			Ba, M, T, S, Y, F, 91	
* Tritonia sp.			B	
Juncaceae				
* Juncus acutus			MG, C	
* Juncus articulatus			Ba	
* Juncus bufonius			Ba	
Juncus caespiticius			Ba	
Juncus kraussii			MG, Ma	
Juncus pallidus			P, Bo, M, T, S, Y	
Luzula meridionalis			Ba, T	
Juncaginaceae				
Triglochin calcitrapum			91	
Triglochin procerum			Ba, M, T, F	
Lamiaceae				
# Hemigenia sericea			MB	
Hemiandra pungens			P, Ba, M, T	
* Stachys arvensis			Ba	
Lauraceae				
Cassytha flava			F, 91	
Cassytha glabella			M	
Cassytha pubescens			91	
Cassytha racemosa			Ba, M, T, F, 91	
Lemnaceae				
Lemna disperma			Ba	
Lobeliaceae				
Lobelia alata			F	
Lobelia tenuior			F	

Taxon	Prio Code	Geographic Range	Recorded Areas	38
Loganiaceae				
Mitrasacme paradoxa			Ba	
Loranthaceae				
Nuytsia floribunda			P, Ba, Bo, M, T	
Lythraceae				
* Lythrum hyssopifolia			Ba	
Malvaceae				
Allogyne huegelii var. glabrescens		^S Manning L. Ma		
* Lavatera plebeia		<i>in Memo area in Yalgoup</i>	MG, 91	
Lawrenzia spicata			91	
* Malva parviflora			MG	
Menyanthaceae				
Villarsia albiflora			Ba	
Villarsia ?capitata			Ba, T	
Mimosaceae				
Acacia cochlearis			Ba, T, Y, F	
Acacia cyclops			Ba, M, T, Y, MG, 91	
Acacia huegelii			Ba, M, T, Y, MG, 91	
Acacia lasiocarpa var. lasiocarpa			F, 91	
* Acacia longifolia			Y, Bl	
Acacia pulchella			P, Ba, Bo, M, T, Y, MG, F, 91	
Acacia rostellifera			T, Ma, F, 91	
Acacia saligna			P, Ba, Bo, M, T, Y, MG, Ma, F, 91	
Acacia stenoptera			Ba, M, T, S, Y, F	
Acacia truncata			Ma, 91	
Acacia willdenowiana			P, M, T, Y	
Molluginaceae				
Macarthuria australis			Ba, T	
Moraceae				
* Ficus carica			MG, H, Ma	
* Morus nigra			MG, Ma, S	
Myoporaceae				
Eremophila glabra			F, 91	
Myoporum insulare			91	
Myrtaceae				
Agonis linearifolia			M, N, H	
Astartea aff. fascicularis			Ba, Bo, M, T, S, Y, F	
Baeckea camphorosmae			Ba, T, S	

Taxon	Prio Code	Geographic Range	Recorded Areas	39
<i>Beaufortia elegans</i>			M	
<i>Calothamnus lateralis</i>			P	
<i>Calothamnus quadrifidus</i>			Ma, 91	
<i>Calytrix angulata</i>			Ba, T, S	
<i>Calytrix flavescens</i>			Ba, M, T, F	
<i>Calytrix fraseri</i>			Ba, M, T, F	
* <i>Chamelaucium uncinatum</i>		S Bold Park	P, M, Ma, Y	
<i>Eremaea ?asterocarpa</i>			Ba, T	
<i>Eremaea pauciflora</i>			Ba, M, T	
<i>Eucalyptus calophylla</i>			P, Ba, M, S, Y, F	
* <i>Eucalyptus citriodora</i>			P	
<i>Eucalyptus decipiens</i>			Ma, MB, 91	
<i>Eucalyptus gomphocephala</i>			Ba, M, T, S, Y, Ma, MG, MB, Ma, F	
<i>Eucalyptus marginata</i>			P, Ba, M, T, S, Y, F	
<i>Eucalyptus rudis</i>			P, Ba, Bo, M, T, S, Y, F	
<i>Eucalyptus todtiana</i>			Ba, T, Y, F	
<i>Hypocalymma angustifolium</i>			P, Ba, M, T, F	
<i>Hypocalymma robustum</i>			P, Ba, M, T, S, Y, F	
<i>Kunzea ericifolia</i>			Ba, M, T, S, Y, F	
* <i>Leptospermum laevigatum</i>			P, M, S, Y, MG	
<i>Melaleuca acerosa</i>			Ma, F, 91	
<i>Melaleuca cuticularis</i>			Co, MG	
<i>Melaleuca huegelii</i>			Ma, MB, 91	
<i>Melaleuca incana</i>			S	
* <i>Melaleuca lanceolata</i>			Ma	
<i>Melaleuca lateritia</i>			P, M, Ro, S, F	
<i>Melaleuca preissiana</i>			Ba, Bo, M, T, S, Y, F	
<i>Melaleuca raphiophylla</i>			P, Bo, M, S, Y, Ma, MG, Co, Ma, F	
<i>Melaleuca seriata</i>			Ba, M	
<i>Melaleuca teretifolia</i>			P, Ba, Bo, M, T, S, MG, F	
<i>Melaleuca thymoides</i>			P, Ba, M, T, F	
<i>Melaleuca viminea</i>			MG	
<i>Pericalymma ellipticum</i>			P, Ba, M, F	
<i>Regelia inops</i>			M	
<i>Scholtzia involucrata</i>			Ba, M, T, S, F	
<i>Verticordia drummondii</i>			Ba, T	
Oleaceae				
* <i>Olea europea</i>			MG	

Taxon	Prio Code	Geographic Range	Recorded Areas	40
Onagraceae				
<i>Epilobium billardierianum</i>			Ba, F	
<i>Epilobium hirtigerum</i>			Ba, F	
* <i>Oenothera stricta</i>			MG	
Orchidaceae				
<i>Caladenia deformis</i>			Ba, T, S, Y	
<i>Caladenia denticulata</i>			Ba, T	
<i>Caladenia discoidea</i>			Ba, T	
<i>Caladenia flava</i>			P, Ba, T, S, Y, F	
<i>Caladenia gemmata</i>			Ba, T	
<i>Caladenia latifolia</i>			Ba, T, Y, F, 91	
<i>Caladenia longicauda</i>			Ba, M, T	
<i>Caladenia ?paludosa</i>			Ba, M, T	
<i>Diuris emarginata</i>			Ba, T	
<i>Diuris longifolia</i>			P, Ba, M, T, F	
<i>Elythranthera brunonis</i>			P, Ba, M, T, F	
<i>Elythranthera emarginata</i>			M	
# <i>Epiblema grandiflorum</i>			Ba	
<i>Leporella fimbriata</i>			M	
<i>Lyperanthus nigricans</i>			Ba, M, Y	
<i>Microtis media</i>			Ba, M, T, Y, F	
* <i>Monadenia bracteata</i>			F, 91	
<i>Prasophyllum fimbria</i>			Ba	
<i>Prasophyllum ovale</i>			Ba, T	
<i>Prasophyllum parvifolium</i>			Ba	
<i>Pterostylis aff. nana</i>			M, T	
<i>Pterostylis recurva</i>			Ba	
<i>Pterostylis scabra var. robusta</i>			M	
<i>Pterostylis vittata</i>			M, S, Y	
<i>Thelymitra benthamiana</i>			F	
<i>Thelymitra campanulata</i>			Ba, M, T	
<i>Thelymitra crinita</i>			M	
Orobanchaceae				
* <i>Orobanche minor</i>			Ba, M, Y	
Oxalidaceae				
* <i>Oxalis pes-caprae</i>			Ba, T	
* <i>Oxalis purpurea</i>			Ba, T	

Taxon	Prio Code	Geographic Range	Recorded Areas	41
Papilionaceae				
<i>Aotus cordifolia</i>			P, Ba, M	
<i>Aotus gracillima</i>			P, Ba, M, T	
<i>Aotus procumbens</i>			M, Y	
<i>Bossiaea eriocarpa</i>			P, Ba, M, , S, YTF	
? <i>Callistachys lanceolata</i>			P	
* <i>Cystus prolifera</i>			M	
<i>Daviesia decurrens</i>			Ba, M, T, Y	
<i>Daviesia divaricata</i>			P, M, Y, F	
<i>Daviesia nudiflora</i>			Ba, M, T, Y	
<i>Daviesia physodes</i>			P, BL, Ba, M, T, S	
<i>Daviesia triflora</i>			P, Ba, M, T, S, Y, F	
<i>Eutaxia virgata</i>			E, Ba, M	
<i>Gompholobium confertum</i>			M	
<i>Gompholobium tomentosum</i>			P, Ba, M, T, S, Y, F	
<i>Hardenbergia comptoniana</i>			P, Ba, Bo, M, T, S, Y, MG, , 91F	
<i>Hovea pungens</i>			P, Ba, M, T, S, F	
<i>Hovea trisperma</i>			Ba, M, T, S, F	
<i>Isotropis cuneifolia</i>			Ba, M, T, S, Y, F	
<i>Jacksonia aff. sericea</i> (swamp form)	eP		N	
<i>Jacksonia furcellata</i>			P, Ba, Bo, M, T, S, Y, 91	
<i>Jacksonia sternbergiana</i>			P, Ba, Bo, M, T, S, Y, F	
<i>Kennedia coccinea</i>			91	
<i>Kennedia prostrata</i>			P, Ba, Bo, M, T, S, Y, F	
<i>Latrobea tenella</i>			Ba, M	
* <i>Lupinus angustissimus</i>			Y, MG	
* <i>Lupinus cosentinii</i>			Ba, T, S, Y, MG	
* <i>Medicago polymorpha</i>			Ba, T	
* <i>Melilotus indicus</i>			Ba, T, MG, F, 91	
<i>Nemcia capitata</i>			P, Ba, M, T, S, Y, F	
<i>Nemcia reticulata</i>			F, 91	
* <i>Ornithopus sativus</i>			Ba	
<i>Oxylobium lineare</i>			P, M	
<i>Pultenaea ochreatea</i>			Ba, M, T, S	
<i>Pultenaea reticulata</i>			P, Ba, T, S, F	
<i>Sphaerolobium vimineum</i>			Ba, M, F	
<i>Templetonia retusa</i>			Ma, MG	
* <i>Trifolium angustifolium</i>			Ba	

Taxon	Prio Code	Geographic Range	Recorded Areas	42
* <i>Trifolium arvense</i>			MG	
* <i>Trifolium campestre</i>			Ba, T, Y, F, 91	
* <i>Trifolium cernuum</i>			Ba, F, 91	
* <i>Trifolium dubium</i>			Ba, T	
* <i>Trifolium glomeratum</i>			Ba	
* <i>Trifolium pratense</i>			Ba, t	
* <i>Vicia hirsuta</i>			Ba, T	
* <i>Vicia sativa</i>			P, Ba, M, T, M, F	
<i>Viminaria juncea</i>			Ba, M, T, S	
Phytolaccaceae				
* <i>Phytolacca octandra</i>			91	
Phormiaceae				
<i>Dianella revoluta</i>			P, Ba, .Bo, M, T, S, Y, MG, 91	
Pinaceae				
* <i>Pinus pinaster</i>			P, Ma	
Pittosporaceae				
<i>Pittosporum phylliraeoides</i>			MG	
<i>Pronaya fraseri</i>			Ba, M	
<i>Sollya heterophylla</i>			MG	
Plantaginaceae				
* <i>Plantago lanceolata</i>			MG	
Poaceae				
* <i>Aira caryophyllea</i>			Ba, Y, F, 91	
* <i>Aira cupaniana</i>			Ba	
* <i>Aira praecox</i>			Ba	
<i>Amphipogon laguroides</i>			Ba, M, T, F	
<i>Amphipogon turbinatus</i>			Ba, M, T, F	
* <i>Arundo donax</i>			Y, MG	
* <i>Avellinia michelii</i>			F	
* <i>Avena barbata</i>			P, Ba, T, F, 91	
* <i>Avena fatua</i>			Y, MG, F	
* <i>Briza maxima</i>			P, Ba, T, S, Y, F, 91	
* <i>Briza minor</i>			P, Ba, T, S, Y, MG, F, 91	
* <i>Bromus diandrus</i>			F, 91	
* <i>Bromus hordeaceus</i>			F, 91	
* <i>Catapodium rigidum</i>			91	
* <i>Cortaderia selleana</i>			T	
<i>Cynodon dactylon</i>			Bo, T, S, Y, MG	

Taxon	Prio Code	Geographic Range	Recorded Areas	43
Danthonia occidentalis			Ba, T, F, 91	
Deyeuxia quadriseta			Ba, T, F	
* Diandrus gussonii			Ba, T	
Dichelachne crinita			F	
* Digitaria sanguinalis			Ba	
* Echinochloa crus-galli			MG	
* Ehrharta calycina			P, Ba, Bo, T, S, Y, MG, F, 91	
* Ehrharta longiflora			Ba, T, Y, F	
Hemarthria uncinata			Ba, T	
* Holcus setiger			F	
* Hordeum leporinum			Y	
* Lagurus ovatus			Ba, T, Y, MG, F, 91	
* Lolium multiflorum			91	
* Lolium perenne			Ba, T	
* Lolium rigidum			Y, F	
Microlaena stipoides			Ba, T, F	
* Paspalum dilatatum			MG	
* Paspalum distichum			Y, MG	
* Paspalum vaginatum			Ba, T, Y	
* Pennisetum clandestinum			Bo, S, Y, MG, Ma	
* Phalaris minor			91	
* Poa annua			F	
Poa drummondiana			Ba, T, 91	
Poa poliformis/porphyroclados			Ba, F, 91	
* Polypogon monspeliensis			Ba, T	
* Rynchelytrum repens			Y	
* Secale cereale			MG	
Sporobolus virginicus			Y, F, 91	
Spinifex longifolius			91	
* Stenotaphrum secundatum			Ba, Bo, T, MG	
Stipa compressa			Ba, T, Y, F	
Stipa flavescens			Ba, T, Y, 91	
Stipa semibarbata			Ba, T	
Stipa variabilis			Ba, T	
* Vulpia bromoides			Ba, T, F	
* Vulpia myuros			Ba, F, 91	
Polygalaceae				
Comesperma calymega			Ba, M, T, F	

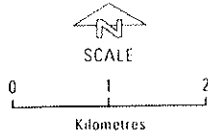
Taxon	Prio Code	Geographic Range	Recorded Areas	44
<i>Conesperma confertum</i>			F, 91	
<i>Conesperma flavum</i>			Ba	
<i>Conesperma virgatum</i>			Ba, M, T	
Polygonaceae				
* <i>Emex austrilis</i>			MG, Ma	
<i>Muehlenbeckia polybotrya</i>			Ba, T	
* <i>Polygonum aviculare</i>			MG, Ma	
<i>Polygonum salicifolium</i>			Bl, Bo, T	
* <i>Rumex acetosella</i>			Ba, T	
* <i>Rumex crispus</i>			Ba, T	
Portulacaceae				
<i>Calandrinia calyptrata</i>			F	
<i>Calandrinia corrigioloides</i>			Ba, T, F, 91	
<i>Calandrinia granulifera</i>			Ba	
<i>Calandrinia liniflora</i>			Y	
<i>Portulaca oleracea</i>			MG	
Primulaceae				
* <i>Anagallis arvensis</i>			P, Ba, M, T, S	
<i>Samolus junceus</i>			F, 91	
<i>Samolus repens</i>			F, 91	
Proteaceae				
<i>Adenanthos cygnorum</i>			P, Ba, M, T, S	
<i>Adenanthos obovatus</i>			S	
<i>Banksia attenuata</i>			P, Ba, Bo, M, T, S, Y, F, 91	
<i>Banksia grandis</i>			Ba, M, T, Y	
<i>Banksia ilicifolia</i>			P, Ba, Bo, M, T, Y, F	
<i>Banksia littoralis</i>			P, Ba, Bo, M, T, F	
<i>Banksia menziesii</i>			P, Ba, Bo, M, T, S, Y, F, 91	
<i>Conospermum stoechadis</i>			Ba	
<i>Conospermum triplinervium</i>			Ba, T	
<i>Dryandra nivea</i>			Ba, T, S, Y, Ma, F, 91	
<i>Dryandra sessilis</i>			M, T, Y, Ma, F, 91	
<i>Grevillea preissii</i>			Ma, F, 91	
<i>Grevillea vestita</i>			Ba, Y, 91	
<i>Hakea lissocarpha</i>			Ba, S, 91	
<i>Hakea prostrata</i>			Ba, M, T, Y, Ma, F, 91	
<i>Persoonia saccata</i>			P, Ba, T, S, Y	
<i>Petrophile brevifolia</i>			Y	

Taxon	Prio Code	Geographic Range	Recorded Areas	45
<i>Petrophile linearis</i>			P, Ba, M, T, S, Y, F	
<i>Petrophile serruriae</i>			F, 91	
<i>Stirlingia latifolia</i>			P, Ba, M, T, S, Y, F	
<i>Synaphea spinulosa</i>			P, Ba, M, T, S, Y	
<i>Xylomelum occidentale</i>			Ba, M	
Ranunculaceae				
<i>Clematis pubescens</i>			Ba, M, T, Ma	
* <i>Ranunculus muricatus</i>			Ba, M, T	
Restionaceae				
<i>Alexgeorgea nitens</i>			Y	
# <i>Empodisma gracillimum</i>			M	
<i>Hypolaena exsulca</i>			Ba, M, T, F	
<i>Leptocarpus aristatus</i>			P, M, Y	
<i>Leptocarpus coangustatus</i>			F	
<i>Leptocarpus scariosus</i>			Ba	
<i>Lepyrodia muirii</i>			Ba, T	
<i>Loxocarya flexuosa</i>			M, S, Y, F, 91	
<i>Loxocarya pubescens</i>			Ba, T, S	
<i>Lyginia barbata</i>			P, M, T, S, Y	
<i>Restio stenostachyus</i>			Ba, T	
Rhamnaceae				
<i>Cryptandra mutila</i>			F, 91	
<i>Spyridium globulosum</i>			Ma, 91	
Rubiaceae				
* <i>Galium aparine</i>			F, 91	
* <i>Galium murale</i>			F	
<i>Opercularia hispidula</i>			Ba, F	
<i>Opercularia vaginata</i>			Ba, M, S, Y, F, Ma	
Rutaceae				
<i>Boronia crenulata</i>			Ba, M, T, F	
<i>Boronia ramosa</i>			M	
<i>Eriostemon spicatus</i>			P, Ba, M, T, S, Y, F	
Salicaceae				
* <i>Salix babylonica</i>			Bl, Bo, MG	
Santalaceae				
<i>Dodonaea aptera</i>			Y	
<i>Dodonaea hackettiana</i>	4	eW	Ba, T, S	
<i>Exocarpos sparteus</i>			Ba, Bo, M, T, S	


Taxon	Prio Code	Geographic Range	Recorded Areas	46
<i>Leptomeria cunninghamii</i>			F	
<i>Leptomeria empetriformis</i>			Ba, T	
<i>Leptomeria spinosa</i>			Ba	
<i>Santalum acuminatum</i>			Ba, 91	
Scrophulariaceae				
* <i>Bellardia trixago</i>			Ba, F	
* <i>Cymbalaria muralis</i>			Ba	
* <i>Dischisma arenarium</i>			Ba, F	
<i>Gratiola peruviana</i>			Ba	
* <i>Parentucellia latifolia</i>			Ba	
* <i>Parentucellia viscosa</i>			Ba, M, F, 91	
* <i>Verbascum virgatum</i>			M, T, 91	
* <i>Veronica arvensis</i>			F	
Solanaceae				
* <i>Nicotiana glauca</i>			Y, MG, 91	
* <i>Solanum nigrum</i>			Ba, T, S, MG, 91	
<i>Solanum symonii</i>			Y, MG, 91	
Stackhousiaceae				
<i>Stackhousia monogyna</i>			P, Ba, MG	
Sterculiaceae				
<i>Thomasia cognata</i>			F, 91	
Stylidiaceae				
<i>Levenhookia pusilla</i>			F	
<i>Levenhookia stipitata</i>			Ba, M, F	
<i>Stylidium brunonianum</i>			P, Ba, M, T, Y	
<i>Stylidium bulbiferum</i>			F, 91	
<i>Stylidium calcaratum</i>			Ba, M	
<i>Stylidium junceum</i>			P, Ba, T	
<i>Stylidium piliferum</i>			Ba, M, T, S, F	
<i>Stylidium repens</i>			Ba, M, T, F	
<i>Stylidium schoenoides</i>			Ba, M, T, Y, F	
Thymelaeaceae				
<i>Pimelea angustifolia</i>			Ba, M, T	
<i>Pimelea calcicola</i>			Ma, F, 91	
<i>Pimelea rosea</i>			P, Bo, M, T, S, Y, F	
<i>Pimelea sulphurea</i>			M, Y, F	
Tropaeolaceae				
* <i>Tropaeolum majus</i>			Y	

Taxon	Prio Code	Geographic Range	Recorded Areas	47
Tremandraceae				
Platytheca galioides			Ba, M, T	
Typhaceae				
Typha domingensis			Ba, T, S	
* Typha orientalis			Y, MG	
Urticaceae				
Parietaria debilis			91	
Verbenaceae				
* Lantana camera			Y	
Violaceae				
Hybanthus calycinus			P, Ba, M, T, S, Y, F, 91	
Vitaceae				
* Vitus vinifera			MG	
Xanthorrhoeaceae				
Xanthorrhoea brunonis			S	
Xanthorrhoea preissii			P, Ba, Bo, M, T, S, Ma, MG, F	
Zamiaceae				
Macrozamia riedlei			Ba, Bo, M, S, Y, F, 91	
Zygophyllaceae				
Zygophyllum fruticosum	S	Port Kennedy	91	
* Tribulus terrestris			MG	

Prepared by the Department of Planning
and Urban Development Perth, Western Australia
March 1990

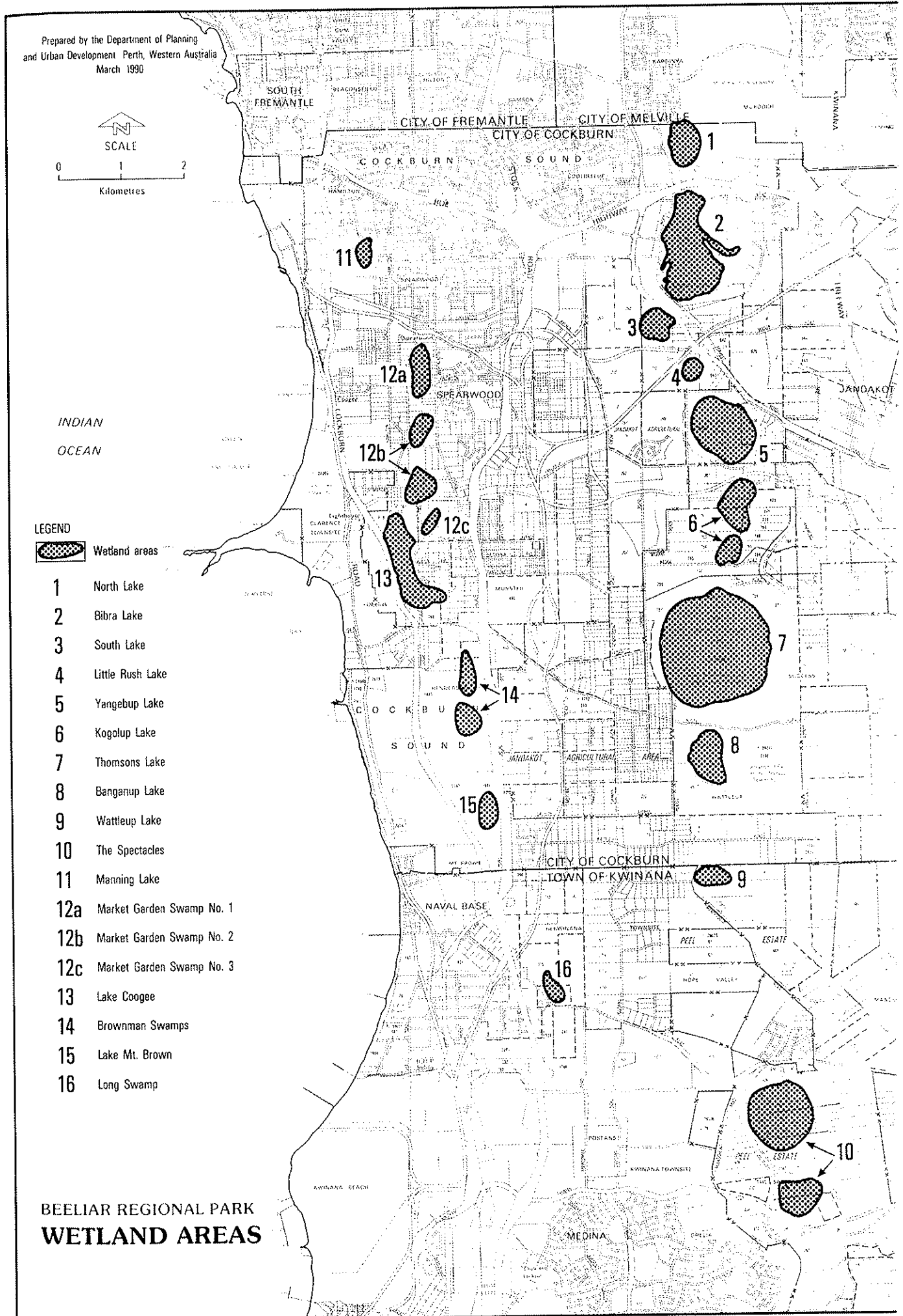


LEGEND

 Wetland areas

- 1 North Lake
- 2 Bibra Lake
- 3 South Lake
- 4 Little Rush Lake
- 5 Yangebup Lake
- 6 Kogolup Lake
- 7 Thomsons Lake
- 8 Banganup Lake
- 9 Wattleup Lake
- 10 The Spectacles
- 11 Manning Lake
- 12a Market Garden Swamp No. 1
- 12b Market Garden Swamp No. 2
- 12c Market Garden Swamp No. 3
- 13 Lake Coogee
- 14 Brownman Swamps
- 15 Lake Mt. Brown
- 16 Long Swamp

**BEELIAR REGIONAL PARK
WETLAND AREAS**



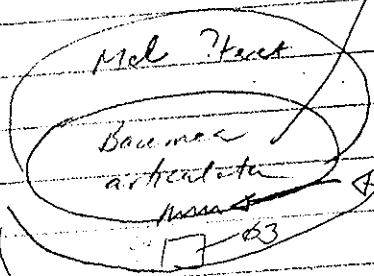
Day PK 25/10/94 1993

Arrive on North Lake
Go into the Banksia (photo)
Large Swathe around
d.

③

Edge Lake

19/10



Male? Harvest

Baumea

articulata

Mosses

63

Mosses

Banksia
Woodland

Yangebup Road realignment, City of Cockburn

**Report and recommendations of the
Environmental Protection Authority**

** checked for Bushplan
proforma
Wait*

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available
on request**

YANGEBUP LAKE

Little Rush Lake Area including surrounding reserve	approx 44	ha
Total wetland	11.5	ha
Paperbarks	2.5	ha
Sedgeland	6.8	ha
Open water	nil	
Modified wetland	2.2	ha

9.7(c) VEGETATION, FAUNA AND MANAGEMENT

Figures 9.8 and 9.10 show wetland plant community section of these two small wetlands. In spite of both wetlands have complex vegetation patterns arising from rising water levels resulting from changing sedgeland and reduction of the paperbark fringe.

**Full document
available
on request**

9.7(d) REFERENCE

Newman, P, (editor) (1976). The Cockburn wetland study. Prepared by students of Murdoch University for the Town of Cockburn.

9.8 YANGEBUP LAKE *BS256 Riv.*

9.8.1 GENERAL INFORMATION

LOCAL AUTHORITY: City of Cockburn
 MRS ZONE: Parks and Recreation Reserve
 RESERVE NUMBER: n/a freehold land
 MANAGEMENT: State Planning Commission
 SYSTEM 6 RECOMMENDATION: M93
 WAC CLASSIFICATION: LE.f.m.p/s.o
 WATER RESERVE: West of the Jandakot Public Water Supply Area
 DRAINAGE: Local drainage from South Lake and Yangebup localities.
 ROADWORKS: Future Yangebup Road and Spearwood Avenue.

NOT USED

9.8.2 PHYSIOGRAPHY AND GEOLOGICAL SETTING

Yangebup is a circular depression with lake deposits, situated at the interface of the Bassendean and Spearwood Dunes. The lake has relatively steep sides and a flat bottom.

9.8.3 AREAS

Area of wetland plus surrounding reserve	approx 142	ha
(bounded by roads)		
Total wetland	90.5	ha
Paperbark/ <u>Acacia</u>	2.6	ha
Sedgeland	11.7	ha
Open water	68.4	ha
Modified wetland	4.8	ha
Area within lake with skeletal trees	2.9	ha
Area of effluent ponds (outside wetland proper)	approx 6.5	ha

9.8.4 HYDROLOGY (Figure 9.12)

No study of the hydrogeology of the lake has been made but a consultants' study has examined drainage of developing urban land on the north-east (South Lakes Estate).

BIBRA LAKE

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Megirian, D (1982), The hydrogeology of North and Bibra Lakes, Western Australia. Unpublished B Sc Honours thesis, Department of Geology, University of Western Australia.

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Newman, P and Hart, L (1984), Deepening urban wetlands: an assessment of water quality in four wetlands on the Swan Coastal Plain, Western Australia. Water, 11 (2) June, 1984.

Seddon, G (1972), 'A sense of place'. University of Western Australia Press, Nedlands.

Van Delft, R (1988), 'Birding sites around Perth'. University of Western Australia Press, Nedlands.

9.7 SOUTH LAKE AND LITTLE RUSH LAKE

B...

9.7(a) GENERAL INFORMATION

(i) South Lake

LOCAL AUTHORITY: City of Cockburn
MRS ZONE: Parks and Recreation
MANAGEMENT: State Planning Commission
SYSTEM 6 RECOMMENDATION: M93
WAC CLASSIFICATION: LE.f.sm.s.so.
WATER RESERVE: West of Jandakot Public Water Supply Area

(ii) Little Rush Lake

As per South Lake except : WAC CLASSIFICATION: LE.f.sm.s.c.

9.7(b) AREAS

South Lake Area including surrounding reserve	approx 47	ha
Total wetland	22.8	ha
Paperbark	9.2	ha
Sedgeland	5.5	ha
Open water	3.8	ha
Modified wetland	4.3	ha

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BS 256' Bass - S

THE COCKBURN WETLANDS :
AN ENVIRONMENTAL STUDY

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BS 244
BASS. STH
NTH LAKE

BS 263
BASS. S.
W. LABBS
BS 269

BS 346
SPEAR. S.
COOGE

BS 390
BASS S
FORREST

BS 247
SPEAR. S.
MANNING

SPEAR. S. 2
SPECTACLES

BS 347
BASS. S.
WANDI

BS 391
BASS. S.
THOMPSON

Proposals for the
Jandakot Botanic Park

Final

BS 248
F BASS. S.

BS 273
+ BS 404
SPEAR. S.

BS 348
BASS. S.

BS 392
SPEAR. S.

BS 254
BASS. S.

CASUARINA

MODONG

HARRY WAKE

STH. LK.

BS 342

BS 353

BS 435
BS 429

BS 256

BASSEND S.

BASS. S.

SPEAR. S.

ANST. KEAN

BANCSLA

MARKE

YANGEB.

Prepared for the Western Australian Planning Commission
by the Ministry for Planning
Albert Facey House
469 Wellington Street
Perth 6000 Western Australia



Ministry for Planning

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BS 261

SPEAR. S.

L. COOGE

BS 262

BASS. S.

PIARRA

BS 344

March 1995

BASS. S.

DE YOUNG

BS 389

BASS. STH

EAST d JAND

YANGEBUP LAKE DRAFT MANAGEMENT PLAN

Prepared for:

City of Cockburn

**Full document
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Prepared by:

• ECOSCAPE •

LANDSCAPE ECOLOGISTS • ENVIRONMENTAL CONSULTANTS
Studio 22 • Royal George Centre • 34 Duke Street East Fremantle 6158
Telephone (09) 319 2300 Facsimile (09) 319 1660

NOVEMBER 1994
M121.142

BS 256
Yangebup Lake
Bass, S.

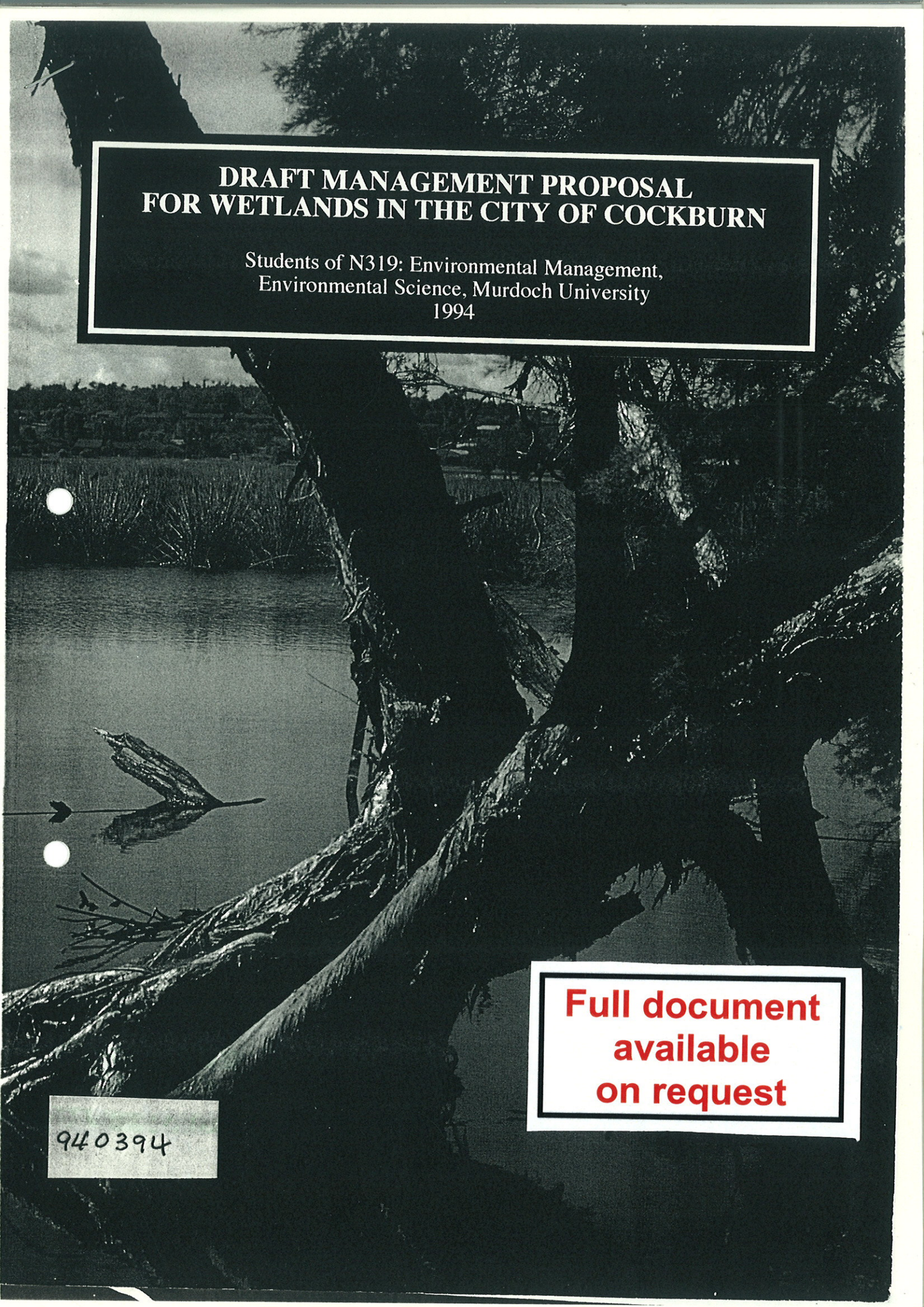
Beeliar Park Catholic school development

Catholic Education Office

Report and recommendations
of the Environmental Protection Authority

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Environmental Protection Authority
Perth, Western Australia
Bulletin 636
July 1992



**DRAFT MANAGEMENT PROPOSAL
FOR WETLANDS IN THE CITY OF COCKBURN**

Students of N319: Environmental Management,
Environmental Science, Murdoch University
1994

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940394

WILD 15740A6A
Nr 13037 152.72

100076

North
Lake

WILD 1574 UAGA
Nr 19037 152.72

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↳ Tongeburp

WILD 1574 UAGA
Nr 13037 152.72

000007

Wellbald

WILD 15740AGA
Nr 13037 152.72

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