

US3 COOLUP RESEARCHES

- 10a
- 3a
- 3b
- 8
- 60

see veg map for
detail of veg.

orthophoto 2032 11 NE
Aug 1991

9/94

**A Preliminary Vegetation Map and Flora List for
Recommendation C 53 Shire of Waroona**


September, 1994

G.J. Keighery 1, B.J. Keighery 2 and N.G. Gibson 1

**1 Dept. Conservation and Land Management
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Subiaco, 6008**

**Full document
available
on request**



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

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

June 2007

GJ Keighery, BJ Keighery, VM Longman and KA Clarke

Contact author: BJ Keighery, Terrestrial Ecosystem Branch, Strategic Policy Division, Department of Environment and Conservation, Western Australia (bronwen.keighery@dec.wa.gov.au)

**Full document
available
on request**

AREA INFORMATION C53
 System 6 Area (C or M) or Update Area (Update)

Conservation Area	
Nature Reserve	
Reserve No	
National Park	
Reserve No	
Local Government	
Reserve No	
Other	
Proposed Conservation Areas	
Local Government	Shire of Warracknatie
Reserve No	420585 (J. Koppitz) ↑ 31437 (Gov) ↑ 31439 (Drainage)
Other	↑ Shire of Murray.

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

TOTAL AREA

Bushland Area	57 6875	hectares
Completely Degraded	375ha	
<i>numerous drains, weed invasion (Love grass) along tracks & drains, Wollemia etc, logging, frequent fires</i>		
<i>Bobrowia</i>		

AREA MAPPED FLORISTIC UNITS

CALM N/A

Units	Site (Condition)	Code	G: WARD	Bound	Area (ha)
3a	φ6 (^{S10} 2)			φ/φ	275
3b	φ1 (^{S10} 2)	φ2 (^{S10} 2.5)		φ/φ	1025
8	φ3 (^{MS2} 2.5)	φ4 (^{MS2} 2)		φ/φ	101875
10a	φ5 (^{MS2} 2)			φ/φ	60
CD				B	375
	φ/φ = proportions from boundaries				
	on veg map				

Boundaries determined by use of

aerial photograph	Metro Street Dir. Run 10 5019, 5021
orthophoto	2032 II NE 8/1991
vegetation map	Keighery, Keighery & Gibson 9/1994
soil map	Environ geol

MURRAY CALM

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C53 (extracted from Swan Coastal Plain database, Wari sites 1-2, Waro sites 3-6, 2/1995).

Department of Environmental Protection System 6 Update: Site Based Flora List C53 Coolup Reserves

(extracted from the CALM Swan Coastal Plain database, Wari sites 1-2, Waro sites 3-6, 2/95)

Amaranthaceae

- Ptilotus drummondii
- Ptilotus manglesii

Anthericaceae

- Agrostocrinum scabrum
- Borya scirpoidea
- Borya sp. scps
- Caesia micrantha
- Caesia occidentalis
- Chamaescilla aff. spiralis scps (GJK 12501)
- Chamaescilla corymbosa
- Corynotheca micrantha
- Dichopogon capillipes
- Dichopogon preissii
- Sowerbaea laxiflora
- Thysanotus sp. manglesianus/patersonii scps
- Thysanotus sp. scps
- Thysanotus sparteus
- Thysanotus thyrsoides
- Tricoryne elatior

Apiaceae

- Daucus glochidiatus
- Eryngium pinnatifidum subsp. pinnatifidum scps
- Homalosciadium homalocarpum
- Hydrocotyle callicarpa
- Hydrocotyle pilifera
- Schoenolaena juncea
- Trachymene pilosa
- Xanthosia huegelii

Aponogetonaceae

- Aponogeton hexatepalus

Asteraceae

- Angianthus drummondii
- Angianthus preissianus
- Asteridea pulverulenta
- Brachyscome bellidioides
- * Conyza bonariensis
- Hyalosperma cotula
- * Hypochaeris glabra
- Lagenifera huegelii
- Podolepis gracilis
- Podotheca angustifolia
- Quinetia urvillei
- Rhodanthe pyrethrum
- * Sonchus oleraceus
- Trichocline spathulata
- * Ursinia anthemoides

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Brassicaceae

- * *Heliophila pusilla*

Callitrichaceae

- Callitriche hamulata*
- * *Callitriche stagnalis*

Campanulaceae

- * *Wahlenbergia capensis*

Caryophyllaceae

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

Centrolepidaceae

- Aphelia cyperoides*
- Centrolepis aristata*
- Centrolepis drummondiana*
- Centrolepis glabra*
- Centrolepis polygyna*

Colchicaceae

- Burchardia multiflora*
- Burchardia umbellata*
- Wurmbea dioica* subsp. aff. *alba* (GJK 12803)

Crassulaceae

- Crassula colorata*
- * *Crassula natans*
- Crassula peduncularis*

Cyperaceae

- Chorizandra enodis*
- Cyathochaeta avenacea*
- * *Cyperus tenellus*
- Isolepis cernua*
- * *Isolepis marginata*
- Isolepis oldfieldiana*
- Isolepis setiformis*
- Lepidosperma "coastal terete" scps* (BJK&NG 231)
- Lepidosperma angustatum*
- Mesomelaena graciliceps*
- Mesomelaena pseudostygia*
- Mesomelaena tetragona*
- Schoenus bifidus*
- Schoenus capillifolius*
- Schoenus curvifolius*
- Schoenus grandiflorus*
- Schoenus humilis*
- Schoenus natans*
- Schoenus odontocarpus*
- Schoenus rigens*
- Schoenus spp. scps*
- Schoenus tenellus*
- Tetraria octandra*

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Dasypogonaceae

Dasypogon bromeliifolius
Kingia australis
Lomandra brittanii
Lomandra caespitosa
Lomandra hermaphrodita
Lomandra sericea
Lomandra suaveolens

Dilleniaceae

Hibbertia acerosa
Hibbertia huegelii
Hibbertia hypericoides
Hibbertia racemosa
Hibbertia stellaris
Hibbertia vaginata

Droseraceae

Drosera bulbosa
Drosera erythrorhiza
Drosera gigantea
Drosera glanduligera
Drosera macrantha
Drosera macrantha sthcsst subsp. macrantha ms
Drosera marchantii subsp. marchantii
Drosera menziesii
Drosera menziesii subsp. menziesii
Drosera menziesii subsp. penicillaris
Drosera stolonifera subsp. porrecta
Drosera stolonifera subsp. stolonifera
Drosera tubaestylis

Elatinaceae

Elatine gratioloides

Epacridaceae

Astroloma pallidum
Conostephium pendulum
Leucopogon propinquus

Euphorbiaceae

Monotaxis grandiflora
Phyllanthus calycinus

Gentianaceae

* Cicendia filiformis

Geraniaceae

* Pelargonium capitatum

Goodeniaceae

Dampiera linearis
Goodenia caerulea
Goodenia micrantha
Lechenaultia biloba
Scaevola canescens

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Scaevola phlebopetala
Scaevola repens var. angustifolia
Scaevola sp. scps

Haemodoraceae

Anigozanthos manglesii
Conostylis aculeata
Conostylis juncea
Haemodorum laxum
Haemodorum simplex
Haemodorum sparsiflorum
Phlebocarya ciliata
Tribonanthes uniflora

Haloragaceae

Myriophyllum echinatum

Hydatellaceae

Trithuria bibracteata
Trithuria submersa

Hypoxidaceae

Hypoxis occidentalis

Iridaceae

* Gladiolus caryophyllaceus
* Homeria flaccida
Orthrosanthus laxus
Patersonia juncea
Patersonia occidentalis
* Romulea rosea
* Romulea rosea var. australis

Isoetaceae

Isoetes drummondii

Juncaceae

* Juncus capitatus
Juncus holoschoenus

Juncaginaceae

Triglochin calcitrapum
Triglochin procerum
Triglochin sp. A FPR (BJK&NG 095)

Lamiaceae

Hemiandra pungens

Lauraceae

Cassytha micrantha

Lentibulariaceae

Polypompholyx multifida

Lobeliaceae

Isotoma pusilla

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Loganiaceae

Mitrasacme palustris

Marsileaceae

Pilularia novae-hollandiae

Menyanthaceae

Villarsia submersa

Mimosaceae

Acacia "applanata" scps map

Acacia nervosa

Acacia pulchella

Acacia stenoptera

Acacia willdenowiana

Myrtaceae

Astartea aff. fascicularis sthct

Baeckea camphorosmae

Eucalyptus calophylla

Eucalyptus gomphocephala

Eucalyptus marginata

Hypocalymma robustum

Kunzea micrantha

Melaleuca leptoclada

Melaleuca viminea

Pericalymma ellipticum

Verticordia densiflora

Onagraceae

Epilobium billardierianum

Orchidaceae

Caladenia "arenicola" scps

Caladenia denticulata

Caladenia discoidea

Caladenia ferruginea

Caladenia flava

Caladenia longicauda warr subsp. longicauda

Caladenia sp. scps

Diuris carinata

Diuris longifolia

Lyperanthus nigricans

Microtis media

Microtis sp. scps

Prasophyllum drummondii

Thelymitra antennifera

Papilionaceae

Bossiaea eriocarpa

Bossiaea eriocarpa (Large flowered form, BJK & NG 229) scps

Daviesia angulata

Daviesia divaricata

Daviesia nudiflora

Daviesia physodes

Daviesia sp. scps

Daviesia triflora

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Eutaxia virgata
Gompholobium aristatum
Gompholobium marginatum
Gompholobium polymorphum
Gompholobium tomentosum
Hardenbergia comptoniana
Hovea trisperma var. grandiflora
Hovea trisperma var. trisperma
Isotropis cuneifolia
Jacksonia angulata
Jacksonia sericea
Kennedia prostrata
* Lotus angustissimus
Nemcia capitata
* Ornithopus compressus
* Trifolium arvense
Viminaria juncea

Philydraceae

Philydrella drummondii
Philydrella pygmaea

Phormiaceae

Dianella revoluta

Pittosporaceae

Pronaya fraseri

Poaceae

Agrostis plebeia
* Aira caryophyllea
* Aira cupaniana
Amphibromus neesii
Amphipogon turbinatus
* Avena fatua
* Briza maxima
* Briza minor
* Bromus diandrus
Danthonia caespitosa
Danthonia occidentalis
Danthonia setacea
* Ehrharta calycina
* Ehrharta longiflora
Microlaena stipoides
Neurachne alopecuroidea
Polypogon tenellus
Stipa campylachne
Stipa compressa
Stipa flavescens
Stipa sp. scps
* Vulpia bromoides
* Vulpia myuros
* Vulpia sp. scps

Polygalaceae

Comesperma virgatum

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Flora list for C53 (extracted from Swan Coastal Plain database, Wari sites 1-2, Waro sites 3-6, 2/1995).

Proteaceae

Banksia attenuata
Banksia grandis
Conospermum capitatum
Conospermum stoechadis
Dryandra nivea
Grevillea pilulifera
Grevillea vestita
Hakea ceratophylla
Hakea incrassata
Hakea sulcata
Hakea varia
Petrophile brevifolia
Petrophile linearis
Petrophile macrostachya
Petrophile media scps var. juncifolius ms
Synaphea petiolaris

Ranunculaceae

Ranunculus sessiliflorus var. sessiliflorus

Restionaceae

Alexgeorgea nitens
Hypolaena exsulca
Leptocarpus canus
Leptocarpus coangustus
Lepyrodia macra
Loxocarya fasciculata
Loxocarya flexuosa

Rubiaceae

Opercularia apiciflora
Opercularia vaginata

Rutaceae

Boronia spathulata
Eriostemon spicatus

Scrophulariaceae

Glossostigma drummondii
Gratiola peruviana
* Parentucellia latifolia

Selaginellaceae

Selaginella gracillima

Sterculiaceae

Thomasia grandiflora

Stylidiaceae

Levenhookia pusilla
Levenhookia stipitata
Stylidium brunonianum
Stylidium calcaratum
Stylidium divaricatum
Stylidium piliferum
Stylidium sp. scps

CONTACT DR N. GIBSON CALM WOODVALE for further information.

Flora list for C53 (extracted from Swan Coastal Plain database, Wari sites 1-2, Waro sites 3-6, 2/1995).

Thymelaeaceae

Pimelea imbricata var. major

Pimelea sulphurea

Xanthorrhoeaceae

Xanthorrhoea preissii

Zamiaceae

Macrozamia riedlei

Keighery, Bronwen

From: Pryde, Jill [Jill.Pryde@dec.wa.gov.au]
Sent: Friday, 29 June 2007 3:35 PM
To: Keighery, Bronwen
Subject: RE: Draft Management Plan for North Waroona Reserves - comments & timeline for finalisation

Thanks for this Bronwen

Your comment "The other grouping is mentioned but I would think that this has not been signed off by the Minister while TEC 8 has". You are correct in that assumption.

Cheers Jill

Jill Pryde
A/Snr Ecologist
Species & Communities Branch
Dept. Environment and Conservation
PO Box 104, Bentley DC WA 6983
Email: Jill.Pryde@dec.wa.gov.au
Ph: 08 9423 2263

From: Keighery, Bronwen [mailto:Bronwen.Keighery@dec.wa.gov.au]
Sent: Friday, 29 June 2007 11:54 AM
To: English, Val; Pryde, Jill
Subject: FW: Draft Management Plan for North Waroona Reserves - comments & timeline for finalisation

Hi Val and Jill

This is the report for C53 Coolup Reserves – (areas waro plots). As discussed by telephone and outlined in the report Greg and I have mapped TEC's in the entire area (map to follow, possibly next week). Also we have retained the use of TEC FCT 8 for comparisons with other Swan Coastal Plain data. The other grouping is mentioned but I would think that this has not been signed off by the Minister while TEC 8 has. Correct me if this assumption is incorrect.

As outlined in the e-mails below I have sent it out to the Management Plan group as a final draft but will get back to them with a final with any changes that you may wish to incorporate.

Cheers Bronwen

PS I will be in the bush next week.

From: Keighery, Bronwen
Sent: Friday, 29 June 2007 11:30 AM
To: 'Anna-Marie Penna'; 'Kim Wilson'
Cc: 'Andrew Del Marco'; Whisson, Gary; Keighery, Greg
Subject: RE: Draft Management Plan for North Waroona Reserves - comments & timeline for finalisation

Hi All

Attached are the files from the pdf of the final draft of this report. Minor comment can be accommodated but I have taken most of the time I can on this report.

Cheers Bronwen

From: Anna-Marie Penna [mailto:ampenna@iinet.net.au]
Sent: Thursday, 28 June 2007 9:40 AM
To: Keighery, Bronwen; 'Kim Wilson'

9/07/2007

Subject: Draft Management Plan for North Waroona Reserves - comments & timeline for finalisation

KEIGHERY Bronwen

From: KEIGHERY Bronwen
Sent: Thursday, 26 April 2007 8:42 AM
To: 'Anna-Marie Penna'
Subject: RE: Info needed for ManPlan for C53 North Waroona Reserve
Attachments: Slide7.jpg; Slide1.jpg; Slide1_1.jpg; Slide2.jpg; Slide2_1.jpg; Slide3.jpg; Slide3_1.jpg; Slide4.jpg; Slide4_1.jpg; Slide5.jpg; Slide5_1.jpg; Slide6.jpg

Hi Anna-Marie
As discussed attached are the jpg files.
Cheers Bronwen

From: Anna-Marie Penna [mailto:ampenna@iinet.net.au]
Sent: Tuesday, 24 April 2007 12:06 PM
To: KEIGHERY Bronwen
Subject: FW: Info needed for ManPlan for C53 North Waroona Reserve
Importance: High

Hi Bronwen
I am assuming that you did not receive this email below so Andrew and I have changed the deadline to get the draft document to Kim Wilson to COB this Thursday.
Are you able to provide the information as per below within this timeframe or could you please let me know what sort of timeframe that you are able to work with?
Thanks heaps again for all your assistance.
Regards
Anna-Marie

Anna-Marie Penna

Environmental Consultant
Ironbark Environmental
and Sustainable Development
Mob: **0411 040 706**
Email: ampenna@iinet.net.au
P O Box 945
Mt Lawley WA 6929

From: Anna-Marie Penna [mailto:ampenna@iinet.net.au]
Sent: Friday, 13 April 2007 10:57 AM
To: 'KEIGHERY Bronwen'
Subject: RE: C53 North Waroona Reserve

Hi Bronwen
Many thanks for the info below. In regards to timeframe for sending the additional information I have discussed the completion deadlines with Andrew and we would need info that is important to go in draft if you are able to supply this to us by next Wednesday morning/lunch time, as we need to get the draft to Kim before end of next week.
Andrew says that information such as the general plant species list can wait as we can send the draft to Kim without that info (by next week) but would it be possible to have it by about 2 weeks time at the latest?
Thanks
Anna-Marie

Anna-Marie Penna

26/04/2007

Subject: C53 North Waroona Reserve

Hi Bronwen

Many thanks for your time today going through the information on your files for the north Waroona reserve, it was greatly appreciated.

May I please ask if you would be able to confirm the following?

1. What was the species of *Caladenia* that you added to the list, and was it DRF or Priority (and if so what priority level)?
2. Are you happy for us to use the same vegetation area/unit breakdowns that you have used in the report (ie *Melaleuca viminea* claypans, marri woodland, jarrah woodland, melaleuca low woodland over pericalymma or viminaria, disturbed areas etc)?
3. Vegetation complex/es - would this area be Guildford veg complex or other, sorry I forgot to ask you this question?

Also, to confirm that I would be keen to receive the following from you if you are able to provide them:

- a) Photograph/s of some of the spectacular flowering vegetation (eg for front cover of the ManPlan) - credits and acknowledgements to yourself/photographer and the Dept.
- b) A copy of the Nats Club paper on the rediscovery of the *Schoenus natans*
- c) Copies of the survey plot information sheets for the site
- d) There was one other thing that I can't remember sorry.

Again, many thanks Bronwen for your time and invaluable information.

Regards

Anna-Marie

Anna-Marie Penna

Environmental Consultant

Ironbark Environmental

and Sustainable Development

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26/04/2007

CONSERVATION BRANCH
INTRA DEPARTMENTAL ADVICE
NB: For Internal Use Only

TO: Gary Williams
SUBJECT: Proposed Deviation of the South West Highway at Waroona
FROM: Jacinta Christie
DATE: 17th February 1999

G. Williams 17/2

Please could I be provided with a copy of your final advice. Thank you.

In reply to your request for comments on the deviation of the South West Highway through the C class reserves north of Waroona, I provide you with the following advice:

The proposed development would pass through an area consisting of four threatened ecological communities. One of these communities is critically endangered according to the 1997 description of threatened ecological communities on the Swan Coastal Plain that is listed in Volume 2a of Perth's Bushplan.

Attached is a copy of a preliminary vegetation map and flora list for the C53 Coolup Reserves, written in September 1994. It clearly states the ecological significance of the area and outlines the importance of the plant communities, some of which include declared rare flora not found anywhere else on the Swan Coastal Plain and a large number of other priority flora and species of significance. This report may also be forwarded to the Main Roads Department for their perusal.

Main Roads have known for a long time that this area is significant. They took on management of System 6 Reserves in order to protect them as roadside vegetation in the late 1980's. In 1995 they were advised that the areas were recognised by the EIA as a Threatened or Poorly Reserved Plant Community.

Recommendation

It is recommended that no development takes place at this site and an alternative route should be used. Our advice would be that a route through these reserves is unlikely to be considered environmentally acceptable.

INTRA-DEPARTMENTAL REFERRAL
EVALUATION DIVISION, *(Name)* BRANCH

TO: Gary Whisson
SUBJECT: Deviation of the South Western Highway,
Waroona Townsite
FROM: Gary Williams
DATE REFERRED: 5 January 2000

The Proposal

Main Roads are seeking the DEP's comments on one of the alignment options around the Waroona townsite called Route 4a. Route 4a impacts on the c Class Reserves north of Waroona between the existing South Western Highway and the railway line.

Stage in the process

Main Roads are only seeking the DEP's comments at this stage.

Previous advice provided

Attached

Information/advice requested

Could you please advise as follows:

What vegetation communities are near the proposed alignment?

How much of this community is remaining on the Swan Coastal Plain?

Are these communities adequately represented in existing reserves?

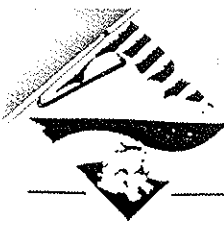
Are there threatened communities near the proposed alignment?

Are there any other significant features of the vegetation near the alignment.?

PLEASE CAN YOU FORWARD YOUR REPLY TO ME BY:

16 January 2000

IF YOU HAVE NO COMMENTS OR IF YOU CANNOT MEET THIS DATE
PLEASE ADVISE ME ASAP - THANK YOU.



1408

Department of Environmental Protection

Head Office:
8th Floor, Westralia Square
141 St Georges Terrace
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Regional Offices:
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Karratha • Kwinana

South West Region
Main Roads Western Australia
Roberston Dr
BUNBURY WA 6230

Your Ref 864-10
Our Ref 25/92 106785
Enquiries Mr R Van Delft

ATTENTION: P Davies

PROPOSED SOUTH WEST HIGHWAY DEVIATION AT WAROONA

The Department of Environmental Protection (DEP) has treated your letter of 12 February 1997 as correspondence (ie not as a referral) and provides the following early advice.

Early advice is provided on the understanding that:

- if you decide to proceed with the proposal it could require referral to the Environmental Protection Authority (EPA) if the environmental impacts are likely to be significant;
- the proposal may change significantly prior to referral; and
- in formulating its advice the Department has not consulted the EPA and has relied on precedent and the professional judgement of officers in formulating the advice;

Accordingly, you should be aware that one a referral is made to the EPA subsequent advice may differ to that given here in response to:


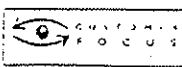
- new policy positions adopted by the EPA;
- discussion of your proposal with the EPA;
- changes to your proposal; or
- new information which affects judgements made by officers of the Department.

You should be aware that this advice (but not your documentation) is available to members of the public.

Officers of the Department of Environmental Protection have examined the detailed alignment plan and report:

- The area to the north of the Pine Plantation is the most significant portion of the C53 area in terms of vegetation significance, being the area where the *Schoneus natans* was re-discovered. The detailed alignment requires removal of part of this area.

PO
To note
3/4
Noted

BUNBURY
864-10
03 APR 1997
GOLAS 38
RECEIVED

- 148
- Almost all of the C53 area contains threatened community types (Department of Conservation and Land Management Workshop notes on the identification of threatened communities. Unpublished notes for Department of Conservation and Land Management Threatened Species and Community Centre);
 - The area of impact from the road would extend significantly beyond the road reserve over time due to the spread of weed seeds from passing traffic; and
 - The road reserve would significantly reduce the corridor value of the System 6 area.

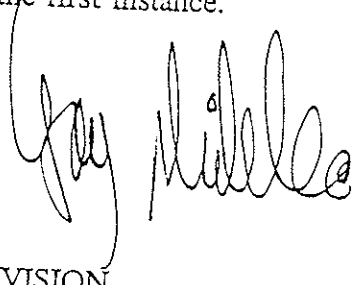
On the basis of the information above, any road proposal following the detailed alignment provided with your letter of 12 February 1997 or through the System 6 C53 area is likely to attract a formal environmental impact assessment.

It is not possible for the Department to predict the outcome of any formal environmental impact assessment. However, the EPA has acknowledged the importance of the threatened community types and identified those areas outside of areas already covered by System 6 recommendations on an Interim List of Protected Areas. The EPA's 1995-96 Annual Report states:

Studies associated with the System 6 Update have enabled the EPA to establish an Interim List of Protected Areas. The areas included on this list are those that have been found to have special significance. They are considered by the EPA to be environmentally important and will be subject to the strictest environmental controls.

Should you have any questions regarding this matter, please contact Mr Ron Van Delft on (09) 222 7079 in the first instance.

Yours faithfully



 K J Taylor
DIRECTOR
EVALUATION DIVISION

26 March 1997

cc: DEP Bunbury Region

EA Warroona Deviation 260397 RVD

Waroona reserve, it was greatly appreciated.

May I please ask if you would be able to confirm the following?

1. What was the species of *Caladenia* that you added to the list, and was it DRF or Priority (and if so what priority level)?
2. Are you happy for us to use the same vegetation area/unit breakdowns that you have used in the report (ie *Melaleuca viminea* claypans, marri woodland, jarrah woodland, melaleuca low woodland over *pericalymma* or *viminaria*, disturbed areas etc)?
3. Vegetation complex/es - would this area be Guildford veg complex or other, sorry I forgot to ask you this question?

Also, to confirm that I would be keen to receive the following from you if you are able to provide them:

- a) Photograph/s of some of the spectacular flowering vegetation (eg for front cover of the ManPlan) - credits and acknowledgements to yourself/photographer and the Dept.
- b) A copy of the Nats Club paper on the rediscovery of the *Schoenus natans*
- c) Copies of the survey plot information sheets for the site
- d) There was one other thing that I can't remember sorry.

Again, many thanks Bronwen for your time and invaluable information.

Regards

Anna-Marie

Anna-Marie Penna

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Keighery, Bronwen

From: English, Val [Val.English@dec.wa.gov.au]
Sent: Friday, 20 July 2007 3:47 PM
To: Keighery, Bronwen
Subject: RE: C 53 Flora and Veg Report

Thanks Bronwen

I did not have any comments on your report! Looks good. Andrew was interested in the *Eremophila glabra* and was going to drop in on his way past and check if the subspecies is the one just nominated to the DRF list.

Cheers

Val

From: Keighery, Bronwen [mailto:Bronwen.Keighery@dec.wa.gov.au]
Sent: Friday, 20 July 2007 2:43 PM
To: 'Anna-Marie Penna'; English, Val; 'Kim Wilson'; Keighery, Greg; Mollóy, Shaun
Subject: C 53 Flora and Veg Report

Hi All

At last a final copy!

Cheers Bronwen

Keighery, Bronwen

From: Pryde, Jill [Jill.Pryde@dec.wa.gov.au]
Sent: Friday, 6 July 2007 3:50 PM
To: Keighery, Bronwen
Subject: Coolup Reserve

Hi Bronwen

Thanks for the mapping of Coolup Reserve – looks good. Will pass on for Val to look at and Monica to check with our mapping.

Jill

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