

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, 4 June 2014 8:58 AM  
**To:** EPA Registrar  
**Cc:** [REDACTED]  
**Subject:** CPS6100/1 - Shire of Murray - Fiegert Road reserve, Barragup - Direct Interest Email - Clearing of Native Vegetation  
**Attachments:** CPS 6100\_1 - application form 2pg excerpt.pdf; CPS 6100\_1 - Map.pdf; CPS 6100\_1 - Context Map.pdf; CPS 6100\_1 - Desktop assessment.docx; Nature Map Report.pdf

Dear Mr Anthony Sutton

**REFERRAL OF A PROPOSAL TO THE ENVIRONMENTAL PROTECTION AUTHORITY UNDER SECTION 38(5) OF THE ENVIRONMENTAL PROTECTION ACT 1986**

The Department of Environment Regulation (DER) has recently received an application from the Shire of Murray to clear 1.31 hectares of native vegetation within Fiegert Road reserve, Barragup, for the purpose of road construction.

As the proposed clearing is within an area subject to Environmental Protection Swan Coastal Plain Lakes Policy 1992, DER is required to refer the application to the EPA. It also falls within the Environmental Protection (Peel Harvey Inlet) Policy 1992 and the Environmental Protection Bulletin No 12, Swan Bioplan – Peel Regionally Significant Natural Areas (Peel RSNA's).

Copies of the application, desktop assessment, context map and map of the application area are attached for your information.

[REDACTED]

Yours sincerely

[REDACTED]  
Manager  
Clearing Regulation

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

Attachments: Map of Proposal  
Context map  
Application Form Excerpt

# Desktop Assessment – CPS 6100/1 – Shire of Murray – Road construction

DPaW Region: Swan  
District: Swan Coastal  
IBRA: Swan Coastal Plain  
LGA: Shire of Murray  
Local Area: 10 km

The application is to clear 1.31 hectares of native vegetation within Fiegert Road reserve, Barragup, for the purpose of road construction.

## Vegetation description

Mapped Beard vegetation association:

- 968 Medium woodland; jarrah, marri and wandoo
- 1000 Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (*Melaleuca* spp.)

Mapped Heddle vegetation complex, Bassendean complex central and/South:

Vegetation ranges from woodland of *Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - *Banksia* species to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* (Jarrah) to *Eucalyptus tottiana* (Pricklybark) in the vicinity of Perth.

## Principle (a)

TPFL Priority Flora recorded within the local area.

TAXON	CONSCODE	Number of Records
<i>Acacia aristulata</i>	T	4
<i>Acacia cochlocarpa</i> subsp. <i>cochlocarpa</i>	T	1
<i>Acacia cummingiana</i>	3	2
<i>Anigozanthos humilis</i> subsp. <i>Badgingarra</i> (S.D. Hopper 7114)	2	1
<i>Banksia dallanneyi</i> subsp. <i>pollostata</i>	3	1
<i>Calytrix ecalycata</i> subsp. <i>pubescens</i>	1	1
<i>Diuris recurva</i>	4	3
<i>Eremophila scaberula</i>	T	10
<i>Eucalyptus</i> x <i>carabyi</i>	4	1
<i>Gastrolobium rotundifolium</i>	3	2
<i>Hemiandra gardneri</i>	T	1
<i>Hemigenia curvifolia</i>	2	4
<i>Melaleuca sclerophylla</i>	3	2
<i>Pertusaria trachyspora</i>	2	1
<i>Petrophile biternata</i>	3	1
<i>Verticordia insignis</i> subsp. <i>eomagis</i>	3	1

WAHerb Priority Flora recorded within the local area.

TAXON	CONSCODE	Number of Records
<i>Acacia benthamii</i>		2 4
<i>Acacia lasiocarpa</i> var. <i>bracteolata</i> long peduncle variant(G.J.Keighery 5026)	2	1
<i>Blennospora doliiformis</i>	3	2
<i>Caladenia speciosa</i>	4	1
<i>Cardamine paucijuga</i>	2	1
<i>Centrolepis caespitosa</i>	4	1
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>	4	1
<i>Cyathochaeta teretifolia</i>	3	1
<i>Dillwynia dillwynioides</i>	3	13
<i>Dillwynia dillwynioides</i>	3	13
<i>Diuris drummondii</i>	T	2
<i>Diuris micrantha</i>	T	1
<i>Diuris purdiei</i>	T	1

TAXON	CONSCODE	Number of Records
<i>Drakaea elastica</i>	T	8
<i>Drosera occidentalis</i> subsp. <i>occidentalis</i>	4	3
<i>Eryngium</i> sp. <i>Ferox</i> (G.J. Keighery 16034) PN	3	1
<i>Grevillea manglesii</i> subsp. <i>ornithopoda</i>	2	1
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	2	1
<i>Lasiopetalum membranaceum</i>	3	1
<i>Microtis quadrata</i>	4	1
<i>Myriophyllum echinatum</i>	3	1
<i>Ornduffia submersa</i>	4	1
<i>Parsonsia diaphanophleba</i>	4	2
<i>Schoenus natans</i>	4	1
<i>Stylidium longitubum</i>	3	3
<i>Synaphea stenoloba</i>	T	5
<i>Tripterococcus paniculatus</i>	4	1
<i>Trithuria australis</i>	4	1

#### TEC's/PEC's located within 15 kilometers of the application area

Community Name	CT_DESC	Number of Sites
Herb rich saline shrublands in clay pans	Vulnerable	9
Dense shrublands on clay flats	Vulnerable	2
Shrublands on dry clay flats	Endangered	1
Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain	Vulnerable	4
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Critically Endangered	27
Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Critically Endangered	14
Northern Spearwood shrublands and woodlands	Priority 3	2
Coastal shrublands on shallow sands	Priority 3	3
<i>Eucalyptus calophylla</i> - <i>Kingia australis</i> woodlands on heavy soils, Swan Coastal Plain	Critically Endangered	2

#### Principle (b)

NatureMap report attached.

The application area falls within a mapped Carnaby's cockatoo feeding area and within 3km and 7km of confirmed roost areas.

A SWREL linkage runs through the center of the application area.

#### Principle (c)

TPFL rare flora recorded within the local area.

TAXON	CONSCODE	RANK	Number of Sites
<i>Acacia aristulata</i>	T		4
<i>Acacia cochlocarpa</i> subsp. <i>cochlocarpa</i>	T		1
<i>Eremophila scaberula</i>	T		10
<i>Hemiandra gardneri</i>	T		1
<i>Diuris drummondii</i>	T		2
<i>Diuris micrantha</i>	T		1
<i>Diuris purdiei</i>	T		1
<i>Drakaea elastica</i>	T		8

#### Principle (d)

TEC's/PEC's located within 15 kilometers of the application area

Community Name	CT_DESC	Number of Sites
Herb rich saline shrublands in clay pans	Vulnerable	9
Dense shrublands on clay flats	Vulnerable	2
Shrublands on dry clay flats	Endangered	1
Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain	Vulnerable	4
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Critically Endangered	27
Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Critically Endangered	14

**Principle (e)**

Vegetation remaining in the local area: 15 percent

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Managed Lands (%)	DEC
<b>IBRA Bioregion</b>					
Swan Coastal Plain	1,501,221	586,975	39		36
<b>Shire</b>					
Shire of Murray	170,583	92,201	54		83
<b>Beard Vegetation Association within Bioregion</b>					
968	136,188	9,795	7		16
1000	94,175	24,972	26		17
<b>Heddle Vegetation Complex</b>					
Bassendean complex central and/South	87,318	24,610	28		3

**Principle (f)**

The application area falls within a Conservation Category and Multiple use wetland.

Nambeelup Brook, a major perennial watercourse, runs through the application area.

The application area is located approximately 500m from Black lake, feeding into the Serpentine River and in close proximity to the Peel Inlet.

**Principle (g)**

Groundwater salinity is mapped between 1000-3000 TDS mg/L.

Soils within the application area are mapped as Cb39 (Northcote et. al.):

The application area falls within a Conservation Category wetland along a perennial watercourse.

**Principle (h)**

The application area falls adjacent to an un-named C Class nature reserve associated with Black Lake and the Serpentine River. Crown Land with departmental interest also falls adjacent to the application area.

**Principle (i)**

The application may impact on the watercourses running through the application area.

**Principle (j)**

Flooding is not likely to be an issue.

**Planning and other relevant matters**

Two aboriginal sites of significance intersect the application area.

The application area falls within the EPP Peel Harvey Inlet policy and EPP, SCP Lakes policy.



# Application for a clearing permit (purpose permit)

Environmental Protection Act 1986 s 51E

## FORM C2

Clearing of native vegetation is prohibited in Western Australia except where a clearing permit has been granted or an exemption applies. A person who causes or allows unauthorised clearing commits an offence.

Date stamp

### Part 1 Land details

The location of the land where clearing is proposed must be accurately described.

Land description: Volume and Folio number, Lot or location number(s), Crown Lease or Reserve number, Pastoral Lease number or Mining Tenement number of all properties where clearing is proposed.

Fiegert Road.  
Unnumbered reserve. please see attachments for location details.

### DEPARTMENT REFERENCE

REGULATION

30 APR 2014

Local government area

Shire of Murray

### Part 2 Proposal

An aerial photograph or map with a north arrow **must** be attached, clearly marking the area proposed to be cleared.

or  
If you have the facilities, a digital map on CDROM of the area to clear in **one** of the following formats:

1. **ESRI Shapefile** with the following properties:
  - **Geometry Type:** Polygon shape
  - **Coordinate System:** GCS GDA 1994 (Geographic latitude/longitude)
  - **Datum:** GDA 1994 (Geocentric Datum of Australia 1994).
2. **Autocad 2000** or earlier; or
3. **Microstation 8** or earlier.

Total area of clearing proposed (hectares)

1.31 hectares

Proposed method of clearing

Mechanical

Period within which clearing is proposed to be undertaken, e.g. May 2010–June 2010

Within the next 5 years

Purpose of clearing

Currently Fiegert Road has an uncompleted section of 670 metres. This section of road needs to be completed to enable a north-south linkage of communities in light of a new subdivision to the south.

### Part 3 Applicant

To apply for a permit you must either be:

- the landowner; or
- have the authority of the landowner to access the land and undertake the clearing.

If granted, the permit will be issued in the name of the applicant.

Are you applying as an individual, a company or an incorporated body? – Enter details for one only (**please print**).

**An individual** – applicant's given names, Family name and title (Mr, Mrs, Ms, etc)

**A company or incorporated body name** (Note: companies **must** supply an Australian Company Number - ACN )  
Shire of Murray; 16036156261

### Ownership of land

- A landowner can be:
- a person who holds the Certificate of Title;
  - a person who is the lessee of Crown land, or
  - a public authority that is responsible for care of the land.

Full name of **all** landowners as they appear on the Certificate of Title (**please print**)

- (1) Crown Land for the purpose of road construction.
- (2)

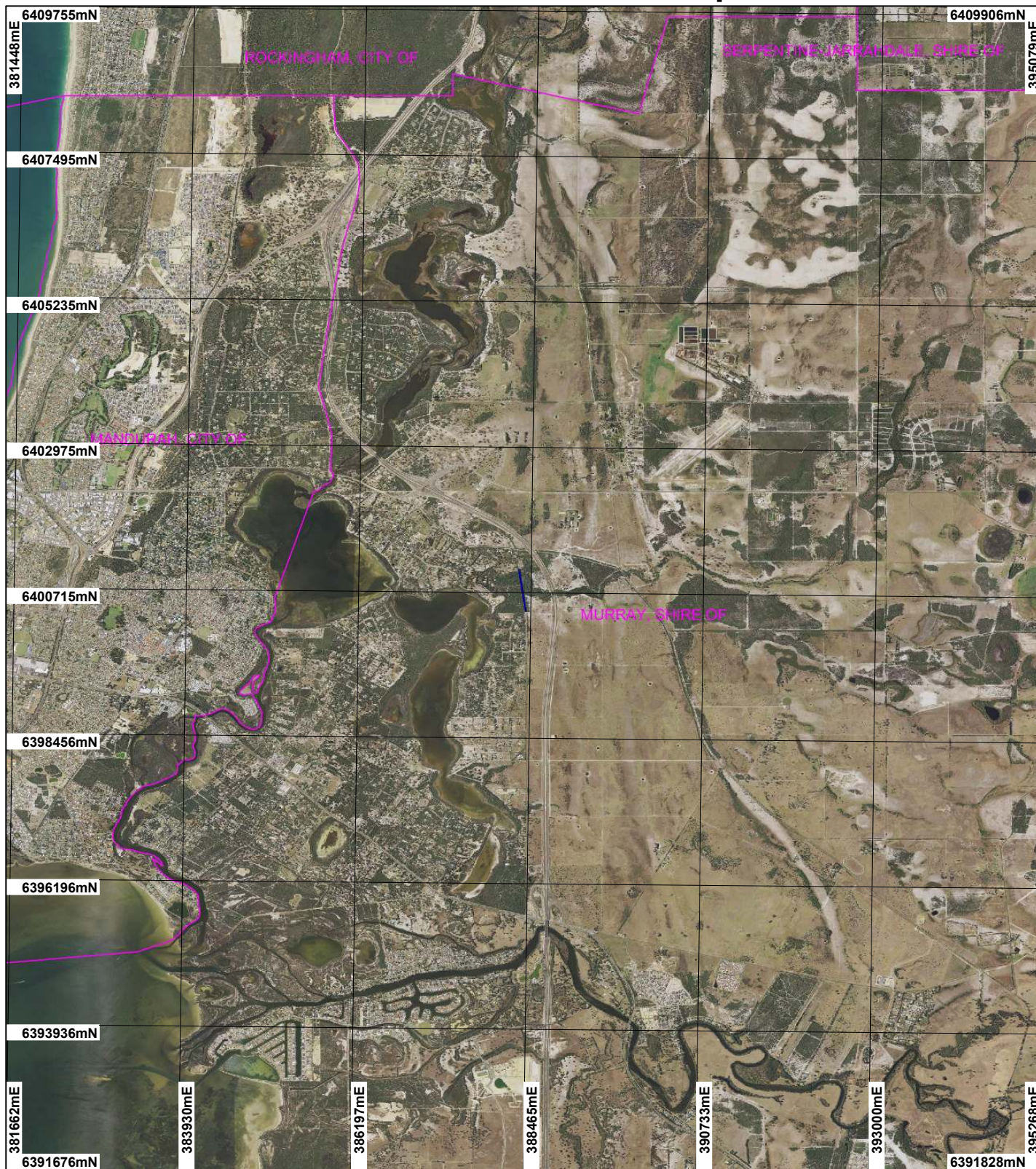
If more than one Certificate of Title, please include details on a separate sheet.



<p><b>Authority to access land</b></p> <p>Please specify the applicant's authority to access land to be cleared. For example, a letter from Department of Planning, a Statutory power or letter of authority from the landowner.</p> <p><b>Note: the letter of authority must explicitly state the applicant has authority to clear on the said land.</b></p>	<p>State nature of authority to access land (please attach copy of authority)</p> <div style="border: 1px solid black; height: 100px;"></div>
<p><b>Contact details</b></p> <p>Person with whom Department of Environment and Conservation or Department of Mines and Petroleum should liaise concerning the clearing application.</p> <p>*If applying as a company or incorporated body, please also supply the registered business office address.</p>	<p>Given names, family name and title (Mr, Mrs, Ms, etc) <span style="float: right;">Position (e.g. Director, Consultant, etc)</span></p> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 150px; height: 30px;"></div> <div style="border: 1px solid black; width: 150px; height: 30px;"></div> </div> <p>Postal / Business address*</p> <div style="border: 1px solid black; padding: 2px;">         Postal          -----          Business       </div> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 150px; height: 20px;">Fixed telephone number</div> <div style="border: 1px solid black; width: 150px; height: 20px;">Mobile telephone number</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 150px; height: 20px;">Fax number</div> <div style="border: 1px solid black; width: 150px; height: 20px;">Email</div> </div>
<b>Part 4 Declaration and signature</b>	
<p>For your application to be accepted, it must be signed either on behalf of the company or as an individual.</p> <p><b>By signing this form you are declaring that the statements on this form are true and correct. Providing false or misleading information is an offence under s112 of the Environmental Protection Act 1986.</b></p>	<p>Please indicate if you are signing as an individual or a company:</p> <p><b>An individual.</b> If an individual landowner is applying, <b>all landowners</b> must sign this form.</p> <p style="text-align: center;">or</p> <p><input checked="" type="checkbox"/> <b>A company.</b> A person duly authorised to sign for an on behalf of the incorporated body or company must sign this form. If your company is required to use a common seal, you must affix this seal and have this application signed by an authorised <u>director(s)</u> in accordance with the Corporations Law.</p> <p>• Has this clearing application or any related matter been referred to the Environmental Protection Authority (EPA)?    Yes    <input checked="" type="checkbox"/> No</p> <p>Signature(s) <span style="float: right;">Date</span></p> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 250px; height: 60px;"> <p>(1) </p> <p>(2)</p> </div> <div style="border: 1px solid black; width: 100px; height: 60px;"> <p>24/4/2014</p> </div> </div> <p>Print name(s) <span style="float: right;">Common Seal (if used)</span></p> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; width: 250px; height: 40px;"> <p>(1) Alan Smith</p> <p>(2)</p> </div> <div style="border: 1px solid black; width: 100px; height: 150px;"></div> </div> <p>Position (e.g. Director, Secretary, Consultant etc)</p> <div style="border: 1px solid black; width: 250px; height: 40px;"> <p>(1) Director Technical Services</p> <p>(2)</p> </div> <p>Company Name and Australian Company Number</p> <div style="border: 1px solid black; width: 250px; height: 20px;"> <p>Shire of Murray</p> </div>



# CPS 6100/1 - Context Map



## LEGEND

- Cadastre
- Local Government Authorities\_1
- Clearing Instruments
- Areas Applied to Clear
- Perth Metropolitan Area
- South 15cm Orthomosaic -



Scale 1:80000  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Prepared by: jarenh  
Prepared for:  
Date: 14/05/2014 9:54:26 AM

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



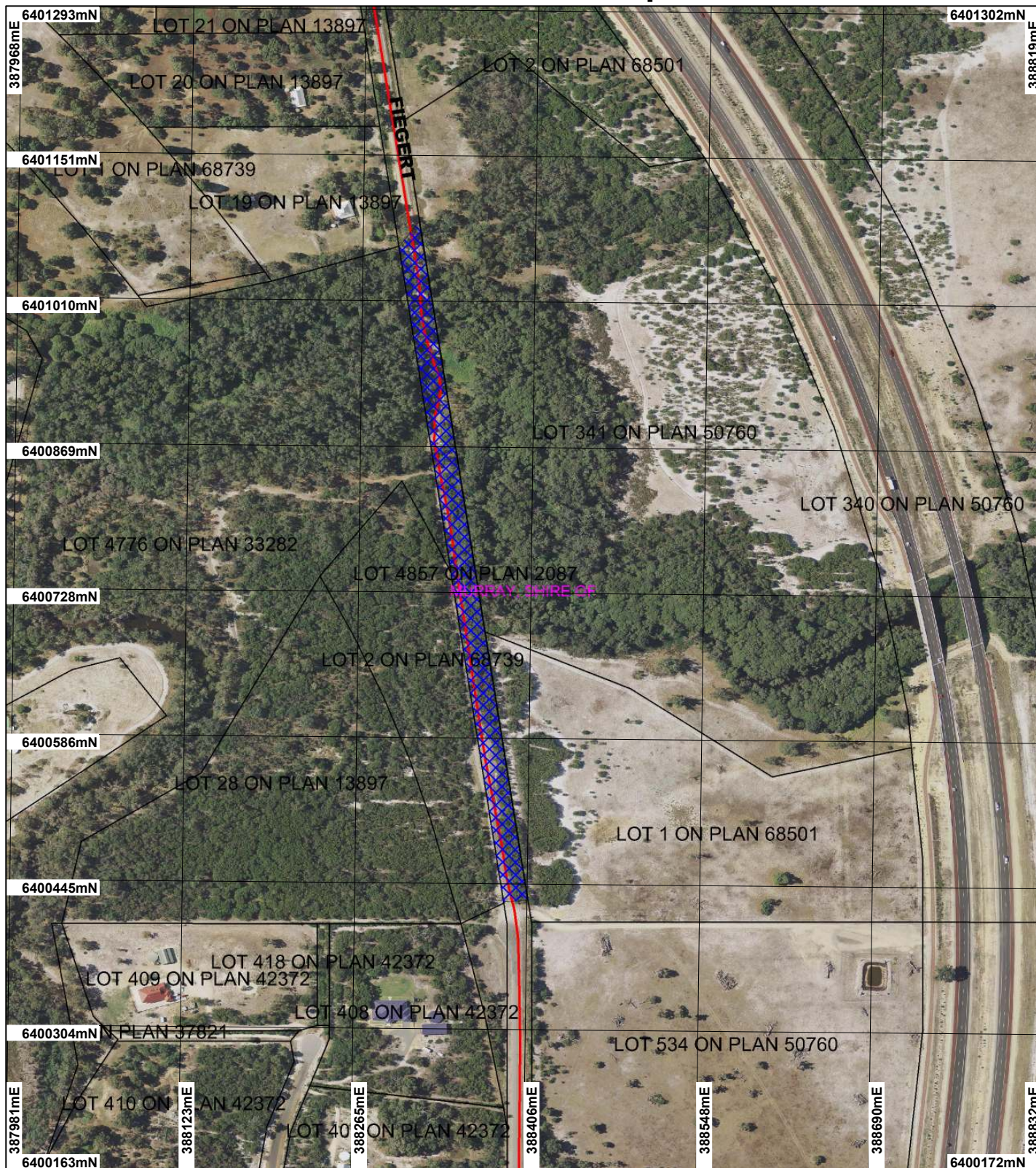
Government of Western Australia  
Department of Environment Regulation

WA Crown Copyright 2002

\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



# CPS 6100/1 - Map



## LEGEND

- Road Centrelines
- Cadastre
- Local Government Authorities\_1
- Clearing Instruments
- Areas Applied to Clear

Perth Metropolitan Area  
South 15cm Orthomosaic -  
Landgate 2012



0 125 m

Scale 1:5000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Prepared by: jarenh

Prepared for:

Date: 14/05/2014 9:44:24 AM

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



Government of Western Australia  
Department of Environment Regulation

WA Crown Copyright 2002



# NatureMap Species Report

Created By Guest user on 30/05/2014

**Kingdom** Animalia  
**Conservation Status** Conservation Taxon (T, X, IA, S, P1-P5)  
**Current Names Only** Yes  
**Core Datasets Only** Yes  
**Method** 'By Circle'  
**Centre** 115°48' 39" E, 32°31' 27" S  
**Buffer** 20km  
**Group By** Conservation Status

Conservation Status	Species	Records
Rare or likely to become extinct	23	346
Protected under international agreement	28	673
Other specially protected fauna	4	11
Priority 1	2	7
Priority 3	3	18
Priority 4	7	32
Priority 5	2	392
<b>TOTAL</b>	<b>69</b>	<b>1479</b>

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
<b>Rare or likely to become extinct</b>				
1.	24050 <i>Balaenoptera physalus</i> (Fin Whale)		T	
2.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)		T	
3.	24345 <i>Botaurus poiciloptilus</i> (Australasian Bittern)		T	
4.	24784 <i>Calidris ferruginea</i> (Curlew Sandpiper)		T	
5.	24790 <i>Calidris tenuirostris</i> (Great Knot)		T	
6.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black-Cockatoo)		T	
7.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo (long-billed black-cockatoo), Baudin's Cockatoo)		T	
8.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo (short-billed black-cockatoo), Carnaby's Cockatoo)		T	
9.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
10.	24372 <i>Charadrius leschenaultii</i> subsp. <i>leschenaultii</i> (Greater Sand Plover (Mongolian))		T	
11.	25576 <i>Charadrius mongolus</i> (Lesser Sand Plover)		T	
12.	24092 <i>Dasyurus geoffroi</i> (Chuditch, Western Quoll)		T	
13.	24043 <i>Eubalaena australis</i> (Southern Right Whale)		T	
14.	33917 <i>Idiosoma nigrum</i> (Shield-backed Trapdoor Spider)		T	
15.	24051 <i>Megaptera novaeangliae</i> (Humpback Whale)		T	
16.	24146 <i>Myrmecobius fasciatus</i> (Numbat, Walpurti)		T	
17.	24798 <i>Numenius madagascariensis</i> (Eastern Curlew)		T	
18.	24099 <i>Phascogale tapoatafa</i> subsp. <i>tapoatafa</i> (Southern Brush-tailed Phascogale, Wambenger)		T	
19.	24462 <i>Phoebastria fusca</i> (Sooty Albatross)		T	
20.	24777 <i>Rostratula benghalensis</i> subsp. <i>australis</i> (Australian Painted Snipe)		T	
21.	24145 <i>Setonix brachyurus</i> (Quokka)		T	
22.	24530 <i>Sterna nereis</i> subsp. <i>nereis</i> (Fairy Tern)		T	
23.	34007 <i>Thalassarche chlororhynchos</i> (Atlantic Yellow-nosed Albatross)		T	
<b>Protected under international agreement</b>				
24.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
25.	24334 <i>Apus pacificus</i> subsp. <i>pacificus</i> (Fork-tailed Swift)		IA	
26.	25558 <i>Ardea ibis</i> (Cattle Egret)		IA	
27.	41324 <i>Ardea modesta</i> (Eastern Great Egret)		IA	
28.	25736 <i>Arenaria interpres</i> (Ruddy Turnstone)		IA	
29.	24779 <i>Calidris acuminata</i> (Sharp-tailed Sandpiper)		IA	
30.	24780 <i>Calidris alba</i> (Sanderling)		IA	
31.	25738 <i>Calidris canutus</i> (Red Knot)		IA	
32.	24786 <i>Calidris melanotos</i> (Pectoral Sandpiper)		IA	
33.	24788 <i>Calidris ruficollis</i> (Red-necked Stint)		IA	
34.	24789 <i>Calidris subminuta</i> (Long-toed Stint)		IA	

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
35.	25575 <i>Charadrius leschenaultii</i> (Greater Sand Plover)		IA	
36.	24293 <i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)		IA	
37.	30932 <i>Limosa lapponica</i> (Bar-tailed Godwit)		IA	
38.	25741 <i>Limosa limosa</i> (Black-tailed Godwit)		IA	
39.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)		IA	
40.	25742 <i>Numenius phaeopus</i> (Whimbrel)		IA	
41.	24843 <i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
42.	24382 <i>Pluvialis fulva</i> (Pacific Golden Plover)		IA	
43.	24383 <i>Pluvialis squatarola</i> (Grey Plover)		IA	
44.	24716 <i>Puffinus pacificus</i> (Wedge-tailed Shearwater)		IA	
45.	24517 <i>Stercorarius parasiticus</i> (Arctic Skua)		IA	
46.	25642 <i>Sterna hirundo</i> (Common Tern)		IA	
47.	24529 <i>Sterna leucoptera</i> (White-winged Black Tern)		IA	
48.	24803 <i>Tringa brevipes</i> (Grey-tailed Tattler)		IA	
49.	24806 <i>Tringa glareola</i> (Wood Sandpiper)		IA	
50.	24808 <i>Tringa nebularia</i> (Common Greenshank)		IA	
51.	24809 <i>Tringa stagnatilis</i> (Marsh Sandpiper)		IA	
<b>Other specially protected fauna</b>				
52.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
53.	24475 <i>Falco peregrinus subsp. macropus</i> (Australian Peregrine Falcon)		S	
54.	25240 <i>Morelia spilota subsp. imbricata</i> (Carpet Python)		S	
55.	24210 <i>Neophoca cinerea</i> (Australian Sea Lion)		S	
<b>Priority 1</b>				
56.	41641 <i>Ctenotus ora</i> (Coastal Plains Skink)		P1	
57.	34030 <i>Geotria australis</i> (Pouched Lamprey)		P1	
<b>Priority 3</b>				
58.	25147 <i>Lerista lineata</i> (Perth Slider, Lined Skink)		P3	
59.	25249 <i>Neelaps calonotos</i> (Black-striped Snake)		P3	
60.	24855 <i>Tyto novaehollandiae subsp. novaehollandiae</i> (Masked Owl (southern subsp))		P3	
<b>Priority 4</b>				
61.	24610 <i>Ardeotis australis</i> (Australian Bustard)		P4	
62.	24376 <i>Charadrius rubricollis</i> (Hooded Plover)		P4	
63.	24215 <i>Hydromys chrysogaster</i> (Water-rat)		P4	
64.	24690 <i>Macronectes giganteus</i> (Southern Giant Petrel)		P4	
65.	24133 <i>Macropus irma</i> (Western Brush Wallaby)		P4	
66.	33992 <i>Synemon gratiosa</i> (Graceful Sunmoth)		P4	
67.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		P4	
<b>Priority 5</b>				
68.	25478 <i>Isoodon obesulus</i> (Southern Brown Bandicoot)		P5	
69.	24153 <i>Isoodon obesulus subsp. fusciventer</i> (Quenda, Southern Brown Bandicoot)		P5	

**Conservation Codes**  
T - Rare or likely to become extinct  
X - Presumed extinct  
IA - Protected under international agreement  
S - Other specially protected fauna  
1 - Priority 1  
2 - Priority 2  
3 - Priority 3  
4 - Priority 4  
5 - Priority 5

<sup>1</sup> For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.