GOVERNMENT OF
WESTERN AUSTRALIA

# CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

**PERMIT DETAILS**
Area Permit Number: 3786/1
File Number: 2010/003932-1
Duration of Permit: From 5 September 2010 to 5 September 2014

**PERMIT HOLDER**
Peter William Ivankovich

**LAND ON WHICH CLEARING IS TO BE DONE**
Lot 111 on Diagram 85871 (House No. 186 RUNNYMEDE BINNINGUP 6233)

**AUTHORISED ACTIVITY**
The Permit Holder shall not clear more than 2.86 hectares of native vegetation, within the area hatched yellow on attached Plan 3786/1.

**CONDITIONS**

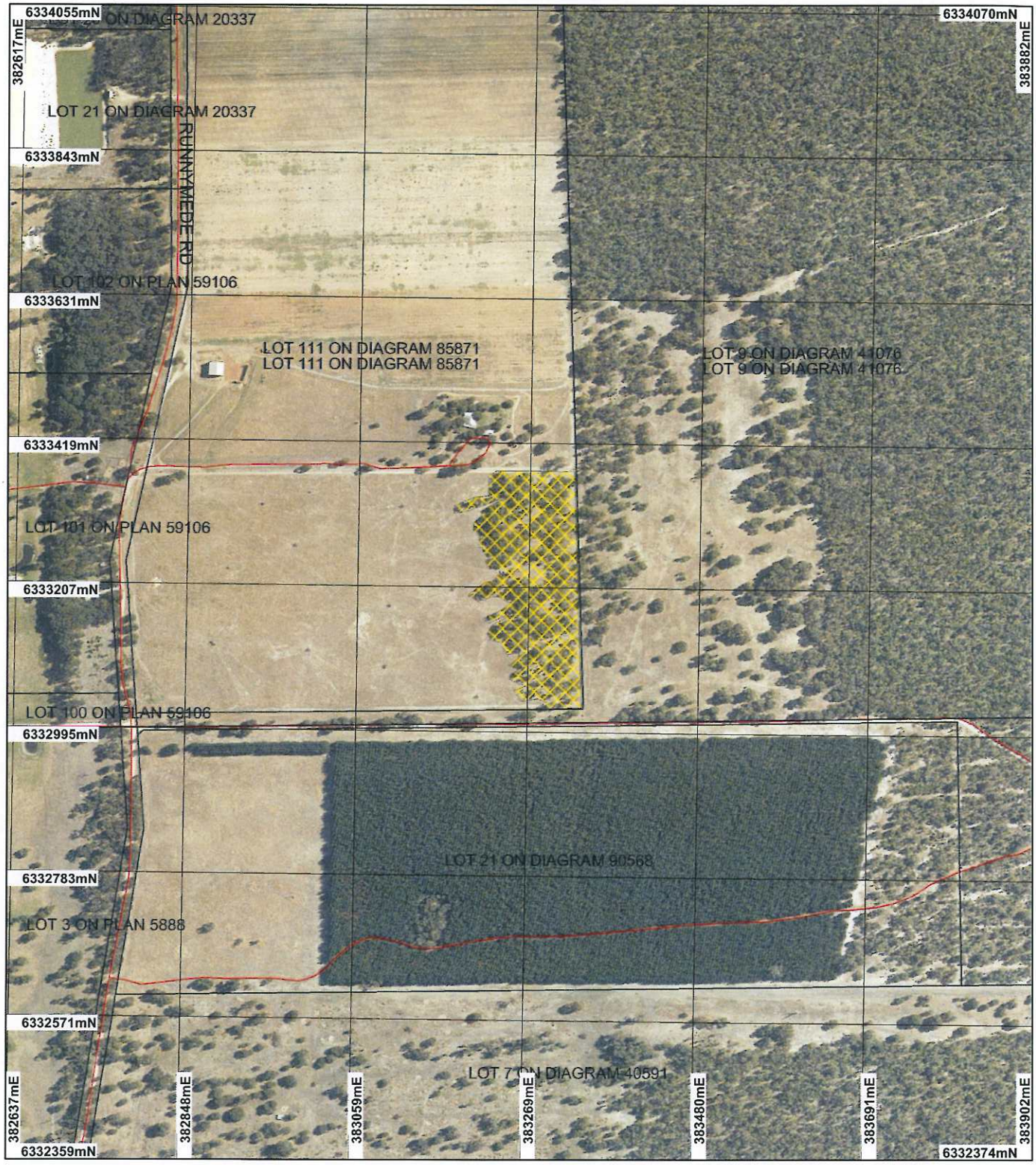
Nil

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

5 August 2010

# Plan 3786/1




## LEGEND

**Clearing Instruments**

- Areas Approved to Clear
- Road Centrelines
- Cadastre

Bunbury 50cm Orthomosaic - Landgate 2008

N

0 ~200 m

Scale 1:7469
(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.*

5/8/10
Date

K Faulkner

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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

Department of Environment and Conservation

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Department of
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# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 3786/1
**Permit type:** Area Permit

### 1.2. Proponent details

**Proponent's name:** Peter William Ivankovich

### 1.3. Property details

**Property:** LOT 111 ON DIAGRAM 85871 (House No. 186 RUNNYMEDE BINNINGUP 6233)
LOT 111 ON DIAGRAM 85871 (House No. 186 RUNNYMEDE BINNINGUP 6233)

**Local Government Area:**

**Colloquial name:**

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 2.86 | | Mechanical Removal | Horticulture |

## 2. Site Information

### 2.1. Existing environment and information

*2.1.1. Description of the native vegetation under application*

| Vegetation Description | Clearing Description | Vegetation Condition | Comment |
|---|---|---|---|
| The vegetation under application is mapped as:<br><br>- Beard 6: Medium woodland; tuart & jarrah<br>- KARRAKATTA COMPLEX - CENTRAL AND SOUTH : Predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species<br><br>(Shepherd, 2007; Heddle, 1980). | The vegetation is considered to be in degraded (Keighery, 1994) condition. The area of vegetation intended to be cleared is located in a fragmented section of remnant vegetation that has been disturbed.<br><br>The vegetation under application comprises a degraded forest of Jarrah and Marri, with occasional Banksia grandis, Agonis flexuosa and Nuytsia floribunda, with a grazed understorey of pasture species (DEC, 2010). | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | The condition and description of the vegetation under application was determined via the use of aerial imagery and a DEC conducted site inspection (DEC, 2010). |

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

**Comments**

**Proposal is not likely to be at variance to this Principle**

The vegetation under application comprises a degraded forest of Jarrah and Marri, with occasional Banksia grandis, Agonis flexuosa and Nuytsia floribunda, with a grazed understorey of pasture species (DEC, 2010).

A Priority Ecological Community (PEC) 'Northern Spearwood shrublands and woodlands' was recorded 4.7Km west. This PEC was mapped as occurring within different soil and veg types to that found within the applied area.

Seventeen priority listed flora species were recorded within the local area. Of these, 7 were mapped as occurring within the same soil type. None were mapped as occurring within the same vegetation type. Due to the degraded (Keighery, 1994) condition and existing disturbance (adjacent to paddock cleared areas), the vegetation under application is not likely to be significant habitat for priority flora.

There are areas of vegetation in the local area (10km radius) which appear to be in much better condition to

that of the applied area. Given that remaining vegetation in surrounding areas is in better condition than that of the applied area, the vegetation under application is not likely to be representative of an area high in biodiversity in a local or regional context, and is therefore not likely to be at variance to this principle.

**Methodology**

References:
DEC (2010)
Keighery (1994)
GIS database:
- Bunbury 50cm Orthomosaic (Landgate 2005)
- DEC Tenure (DEC 2010)
- SAC Biodatasets (accessed July 2010)
- Declared Rare and Priority Flora List (DEC 2010)
- Heddle Vegetation Complexes (DEP 1995)
- Pre European Vegetation (DA 2001)
- Clearing Regulations, Environmentally Sensitive Areas (2009)
- Current Extent of Native Vegetation (NLWRA 2001)
- Soils, Statewide DA 11/99

**(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

Within the local area (10km radius), 14 fauna species of conservation significance were recorded. Of these, 3 may be able to utilse the vegetation under application as habitat given the presence of jarrah, tuart and marri trees, namely Carnaby's Black-Cockatoo (Calyptorhynchus latirostris), Forest Red-tailed Black-Cockatoo (Calyptorhynchus banksii naso) and Brush-tailed Phascogale (Phascogale tapoatafa ssp) (DEC, 2010a; DEC, 2010b; CALM, 2005).

However due to the mostly degraded (Keighery, 1994) condition of the vegetation under application and minimal linkage potential of the vegetation under application (DEC, 2010), the proposed clearing is not likely to significantly impact on local linkages or fauna species within the local area. Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**

References:
DEC (2010a)
DEC (2010b)
CALM (2005)
Keighery (1994)
GIS database:
- SAC Biodatasets (accessed July 2010)
- Heddle Vegetation Complexes (DEP 1995)
- Pre European Vegetation (DA 2001)

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments**

**Proposal may be at variance to this Principle**

There are no records of rare flora occurring within the applied area. The closest recorded rare flora species, Drakaea elastica and Drakaea micrantha, were recorded 2.8km SE and 3km SW of the applied area respectively. These species are mapped as occurring within the same soil type but different vegetation type to that of the application area. Of these 2 rare species, Drakaea micrantha is more likely to find the application area suitable as habitat. D. micrantha inhabits infertile grey sands and can be found in jarrah (Eucalyptus marginata) woodland or forest. It usually grows on old firebreaks and in disturbed sites where competition from other plants has been removed (Brown et al. 1998).

This being considered, the proposed clearing may be at variance to this principle, however a DEC site inspection did not identify any issues relating to rare flora (DEC, 2010).

**Methodology**

References:
Brown et al (1998)
DEC (2010)
GIS database:
- SAC Biodatasets (accessed July 2010)
- Declared Rare and Priority Flora List (DEC 2010)
- Heddle Vegetation Complexes (DEP 1995)
- Pre European Vegetation (DA 2001)
- Current Extent of Native Vegetation (NLWRA 2001)
- Soils, Statewide DA 11/99

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

No known Threatened Ecological Communities (TEC) were recorded within the area under application. The closest TEC, 'Shrublands and woodlands on Mulchea Limestone,' was recorded 4.5km east.

Given the location of the nearest TEC and the mostly degraded (Keighery, 1994) condition of the vegetation under application, the proposed clearing is not likely to be at variance to this principle.

**Methodology**

References:
Keighery (1994)
GIS database:
- SAC Biodatasets (accessed July 2010)
- Heddle Vegetation Complexes (DEP 1995)
- Pre European Vegetation (DA 2001)
- Soils, Statewide DA 11/99

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level(Commonwealth of Australia 2001).

Beard vegetation type 6 has approximately 39.94% remaining within the Shire and 25.88% remaining within the bioregion (Shepherd, 2007). The Karrakatta Complex - Central and South, which is also mapped as occurring within the applied area, has approximately 29.5% of pre-European vegetation remaining (Heddle, 1980). There is approximately 30% remaining native vegetation within the local area (10km radius).

The vegetation under application comprises a degraded forest of Jarrah and Marri, with occasional Banksia grandis, Agonis flexuosa and Nuytsia floribunda, with a grazed understorey of pasture species (DEC, 2010).

While some of the percentages are below the recommended threshold of 30%, given that the application area is relatively small (2.86ha), in degraded condition and considering that areas of remnant vegetation in better condition persists in the local area, impacts to vegetation communities are expected to be negligible.

**Methodology**

References:
Commonwealth of Australia (2001)
DEC (2010)
Heddle (1980)
Shepherd (2007)
Keighery (1994)
GIS database:
- Bunbury 50cm Orthomosaic (Landgate 2005)
- SAC Biodatasets (accessed July 2010)
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Heddle Vegetation Complexes (DEP 1995)
- Pre European Vegetation (DA 2001)
- Current Extent of Native Vegetation (NLWRA 2001)

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

No watercourses or wetlands are located within the applied area. A perennial swamp is situated 770m west and an EPP Lake /multiple use wetland is located 500m west. There are also a further 3 conservation category wetlands located within 2km of the applied area.

Due to the distance between the nearest wetland, the vegetation under application is not considered to be growing in association with a watercourse or wetland and it is not anticipated that the clearing of 2.86ha of native vegetation in a disturbed setting will impact on water tables in an adverse manner.

Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**

GIS Database:

- EPP Lakes Policy Area - DEP 14/05/97
- EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

The vegetation under application is considered to be in degraded to good (Keighery, 1994) condition, with the majority of the vegetation appearing to be in degraded condition. The area of vegetation intended to be cleared is located in a fragmented section of remnant vegetation that has been disturbed. The soils of the application area are described as subdued dune-swale terrain: chief soils are leached sands (Northcote et al. 1960-68).

Due to the even topography and sandy soils of the applied area, water erosion and water logging are unlikely to result from the proposed clearing.

There is no visible degradation on the property or on properties nearby (Commissioner of Soil and Land, 2010). It is considered unlikely that the proposed clearing or the proposed land use will result in degradation (Commissioner of Soil and Land, 2010); therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**

References:
Commissioner of Soil and Land (2010)
Keighery (1994)
Northcote et al (1960-68)
GIS Database:
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 2002

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

There are several conservation areas located within the local area (10km radius). The closest, Myalup State Forest, is situated 2.6Km north. There is also an area of CALM land situated 3Km south. There is a large amount of remnant vegetation persisting between the applied area and the abovementioned conservation areas. This vegetation is in better condition to that of the applied area.

Given that the vegetation under application is in predominately degraded (Keighery, 1994) condition, it is not likely to be significantly contributing to the values of the nearby conservation areas or providing a buffer to these areas. Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**

References:
Keighery (1994)
GIS database:
- Bunbury 50cm Orthomosaic (Landgate 2005)
- DEC Tenure (DEC 2010)

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

**Comments**

**Proposal is not likely to be at variance to this Principle**

No watercourses or wetlands are located within the applied area. A perennial swamp is situated 770m west and an EPP Lake /multiple use wetland is located 500m west. There are also a further 3 conservation category wetlands located within 2km of the applied area.

Due to the distance between the nearest wetland and the applied area, it is not anticipated that the clearing of 2.86ha of native vegetation in a disturbed setting will impact on water tables in an adverse manner.

Ground water salinity is mapped as 500 - 1000 mg/L. It is also considered unlikely that the proposed clearing will result in any significant alterations to the quality of groundwater, given that there is a large amount of native vegetation remaining directly to the east and south and considering that the applied area is situated in a

paddock cleared area.

The proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Database:
- EPP Lakes Policy Area - DEP 14/05/97
- EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

### (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

**Comments**

**Proposal is not likely to be at variance to this Principle**

The proposed clearing of 2.86ha of native vegetation in mostly degraded (Keighery, 1994) condition, is not anticipated to exacerbate the risk of flooding. Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology** References:
Keighery (1994)
GIS Database:
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Soils, Statewide DA 11/99
- Topographic Contours, Statewide - DOLA 12/09/02

### Planning instrument, Native Title, Previous EPA decision or other matter.

**Comments**

The application area lies within the South West Coastal Groundwater Area. The Department of Water (DoW) have advised that the applicant has a current groundwater licence for Lot 111 (DEC Ref: A318768).

The Shire has provided comment on the proposed clearing (DEC Ref: A323299) and has stated that there is no objection to the proposed clearing subject to the following conditions:
- A minimum of 250 native tree species are to be planted and maintained elsewhere on the property to compensate for the removed trees.
- The proposed location, species and density of planting is to be provided by Council for approval prior to the commencement of any clearing.
- All planting is to be undertaken within 12 months of this Council approval to the satisfaction of the Council

Lot 111 is zoned for general farming.

**Methodology** GIS database:
- Cadastre - Landgate Dec 07
- RIWI Act, Groundwater Areas - DoW 13/07/06
- RIWI Act, Irrigation Districts - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Aboriginal Sites of Significance 26 April 2007
- Public Drinking Water Source Areas (PDWSAs) ? 07/02/06

## 4. References


Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.

CALM (2005) Fauna Note No. 06/2005 Red-tailed Black Cockatoo, Department of Conservation and Land Management.

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commissioner of Soil and Land Conservation (2010); Land Degradation Advice and Assessment Report for clearing permit application CPS 3786/1 received 5/08/2010; Department of Agriculture and Food Western Australia (DEC Ref: A323271).

DEC (2010) Regional Advice, South West Region, Department of Environment and Conservation. DEC Ref: A322939

DEC (2010a) NatureBase - Brush-tailed Phascogale Fauna Species Profile: Accessed at http://www.naturebase.net/content/view/840/1288/. Accessed 21/July/2010. Department of Environment and Conservation, Western Australia.

DEC (2010b) NatureBase - Carnaby's Black-Cockatoo Fauna Species Profile: . Accessed at http://www.naturebase.net/content/view/840/1288/. Accessed 21/July/2010. Department of Environment and Conservation, Western Australia.

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2007) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

## 5. Glossary

| Term | Meaning |
|---|---|
| CALM | Department of Conservation and Land Management (now DEC) |
| DAFWA | Department of Agriculture and Food |
| DEC | Department of Environment and Conservation |
| DEP | Department of Environmental Protection (now DEC) |
| DoE | Department of Environment (now DEC) |
| DoW | Department of Water |
| DMP | Department of Mines and Petroleum (ex DoIR) |
| DRF | Declared Rare Flora |
| EPP | Environmental Protection Policy |
| GIS | Geographical Information System |
| ha | Hectare (10,000 square metres) |
| TEC | Threatened Ecological Community |
| WRC | Water and Rivers Commission (now DEC) |