

#### CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 5330/1

Permit Holder: Shire of Esperance

**Duration of Permit:** 25 January 2013 – 25 January 2020

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

## PART I-CLEARING AUTHORISED

## 1. Purpose for which clearing may be done

Clearing for the purpose of expanding an existing truck wash and liquid waste facility.

## 2. Land on which clearing is to be done

Lot 1885 on Deposited Plan 171656, Myrup

## 3. Area of Clearing

The Permit Holder must not clear more than 3.3 hectares of native vegetation within the area hatched yellow on attached Plan 5330/1.

## 4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

## 5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the right to access land under the Land Administration Act 1997 or any other written law.

## 6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

## PART II - ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

## 7. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

## 8. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) shall only move soils in dry conditions;
- (c) ensure that no dieback or weed-affected soil, mulch, fill or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## 9. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil within the area cross-hatched red on attached Plan 5330/1.
- (b) within 12 months following the commencement of clearing authorised under this permit, revegetate and rehabilitate the areas cross-hatched red on attached Plan 5330/1 by:
  - (i) ripping the ground on the contour to remove soil compaction; and
  - (ii) laying the vegetative material and topsoil retained under condition 9(a) on the areas crosshatched red on attached Plan 5330/1;
  - (iii) deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area; and
  - (iv) ensuring only local provenance seeds and propagating material are used to revegetate and rehabilitate the area.
- (c) within 18 months of undertaking revegetation and rehabilitation in accordance with condition 9(b) of this Permit:
  - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
  - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 9(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the Permit Holder must undertake additional *planting* or *direct seeding* of native vegetation in accordance with the requirements of condition 9(b)(iii) and 9(iv) of this Permit.
- (d) Where additional planting or direct seeding of native vegetation is undertaken in accordance with condition 9(c)(ii) of this permit, the Permit Holder shall repeat condition 9(c)(i) and 9(c)(ii) within 24 months of undertaking the additional planting or direct seeding of native vegetation.
- (e) Where a determination by an environmental specialist that the composition, structure and density within areas revegetated and rehabilitated will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 9(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 9(c)(ii), the CEO may require the Permit Holder to undertake additional planting and direct seeding in accordance with the requirements under condition 9(c)(ii).

## 10. Records to be kept

The Permit Holder must maintain the following records in relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 9 of this Permit:

- (a) the location of any areas revegetated and rehabilitated, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) a description of the revegetation and rehabilitation activities undertaken;
- (c) the size of the area revegetated and rehabilitated (in hectares);
- (d) the species composition, structure and density of revegetation and rehabilitation, and
- (e) a copy of the environmental specialist's report.

## 11. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 10 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 25 October 2019, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(a) of this Permit.

#### DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of Phytophthora species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

fill means material used to increase the ground level, or fill a hollow;

*local provenance* means native vegetation seeds and propagating material from natural sources within 50kms kilometres of the area cleared.

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing mulch:

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

weed/s means any plant -

- (a) that is declared under the section 37 of the Agriculture and Related Resources Protection Act 1976; or
- (b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

M Warnock A/MANAGER

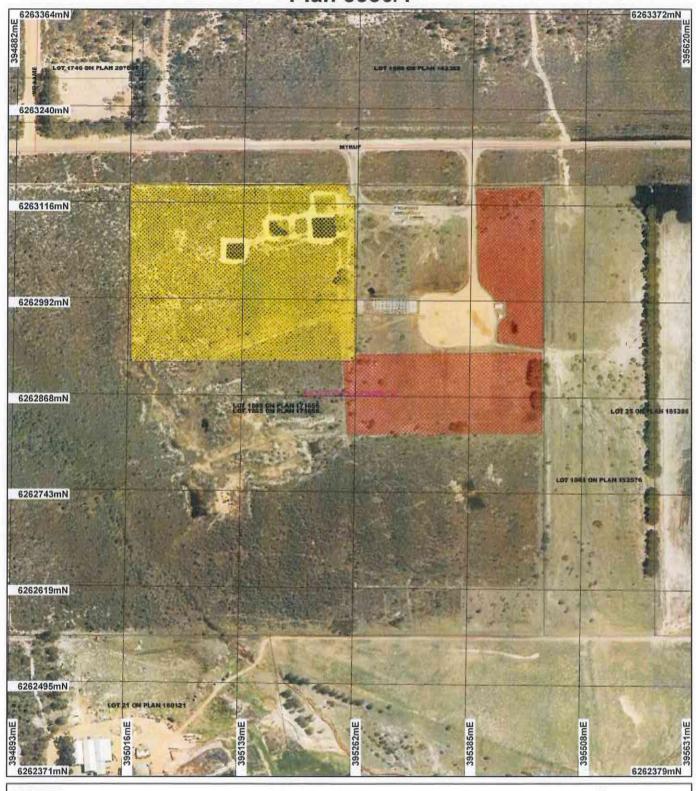
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NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

3 January 2013

# Plan 5330/1



# LEGEND

Clearing Instruments

Areas Subject to Conditions
Areas Approved to Clear Noad Centrelines

☐ Cadastre

Recently added Local Government

--> Image Index

Esperance Causeway 50cm Orthomosaic - Landgate 2007



Scale 1:4376

Geocentric Datum Australia 1994

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

M, Warnock

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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# **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details

Permit application No.:

5330/1

Permit type:

Purpose Permit

1.2. Proponent details

Proponent's name:

Shire of Esperance

1.3. Property details

Property:

3.3

LOT 1885 ON PLAN 171656 (Lot No. 1885 MYRUP MYRUP 6450)

Local Government Area:

Colloquial name:

Shire of Esperance

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing Mechanical Removal For the purpose of: Building or Structure

1.5. Decision on application

Decision on Permit Application:

Decision Date:

3 January 2013

## 2. Site Information

## 2.1. Existing environment and information

## 2.1.1. Description of the native vegetation under application

#### Vegetation Description

The area under application is mapped as Beard Vegetation Association 6048, which is described as shrublands; banksia scrub-heath on sandplain in the Esperence Plains Region (Shepherd et al, 2001).

#### Clearing Description

This amended application proposes to clear 3.3 hectares of vegetation for the purpose of expanding an existing vehicle wash and liquid waste facility.

The area under application consists of Banksia heathland comprising a minimal overstory of Nuytsia floribunda with occasional Lambertia inermis (GHD, 2012).

The middle stotey is dominated by Melaleuca striata, Xanthorrhoea platyphylla, Calothamnus gracilis, Daviesia incrassata and Micromyrtus elobata with occasional Banksia pulchella and B. repens (GHD, 2012).

Understory consists primarily of variety of sedges/grasses with some areas carpeted with Drosera glanduligera. Much of the understory contains juvenile plants of middlestory species (GHD, 2012).

Approximately 0.4 hectares of the footprint area (removed from the application area) is in a degraded (Keighery, 1994) condition due to Pennisetum clandestinum dominating the native vegetation (GHD, 2012). To the east of the Pennisetum clandestinum infestation the vegetation is also degraded as there is medium weed load with dead and dying Xanthorroea and Banksia species (GHD, 2012).

The reminder of the site is in a very good (Keighery, 1994) condition (GHD, 2012).

#### Vegetation Condition

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)

To

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)

#### Comment

The condition of the vegetation was determined via supporting information provided by the applicant (GHD, 2012) and through digital imagery.

## 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 may be at variance to this Principle

The amended application proposes to clear up to 3.3 hectares of native vegetation within a larger footprint area of 5.5 hectares within Lot 1885 on Plan 171656, for the purpose of expanding an existing vehicle wash and liquid waste facility.

The majority of the vegetation under application is in very good (Keighery, 1994) condition.

Seven priority flora species have been mapped within the local area (10km radius). Of these seven, the application area contains suitable habitat for three of these species. A springtime flora survey of the area under application has not been undertaken, however suitable vegetation and soil types appear to be present.

In May 2010 a flora survey was conducted over the application area and did not identify any rare or priority flora. However, his survey was conducted outside of the peak flowing period for the priority flora mapped within the application area and was not conducted by qualified botanists.

Two Priority Ecological Communities (PEC) have been mapped within the local area (10km radius). The closest being a priority 3 PEC, Esperance Sandplain, which was recorded approximately 5km north west of the application area. This PEC consists of 'Scrub heath on deep sand with Banksia and Lambertia, and Banksia scrub heath on sandplain'. The area under application is located on the same soil and vegetation types as this PEC and contains Banksia and Lambertia species (Shire of Esperance, 2010). The area under application has not been adequately surveyed and therefore the presence or absence of this PEC has not been confirmed.

Carnaby's cockatoo (Listed as Rare or Likely to become Extinct) has been mapped within the local area (10KM radius) (DEC, 2007-). Suitable foraging habitat for this species exists in the application area. The area under application is immediately surrounded by a number of large parcels of Crown land which contain vegetation in equal or better condition and therefore the application area is unlikely to constitute significant habitat for this species.

Given the very good (Keighery, 1994) condition of the area and the potential for priority flora and a PEC the proposed clearing may be at variance to this principle.

Avoid and minimise measures, weed and dieback management practices and the requirement to retain topsoil and rehabilitate an adjacent area of previously cleared land (approximately 3.5 hectares) will assist in mitigating the potential impacts outlined above.

#### Methodology

References:

DEC (2007-) Keighery (1994)

GIS Database:

- Pre European Vegetation
- SAC Biodatasets accessed November 2012

## (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

The only terrestrial fauna species mapped within the local area (10km radius) is Carnaby's cockatoo (Calyptorhynchus latirostris) (DEC, 2007-). This species is listed as Rare or Likely to Become Extinct under the State Wildlife Conservation Act 1950 and Endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Carnaby's cockatoo nests in large hollows of eucalyptus trees and forages on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (Banksia, Hakea, Grevillea), as well as Allocasuarina and Eucalyptus species, Corymbia calophylla and a range of introduced species, especially seeds from cones of Pinus species (Shah, 2006; Valentine and Stock, 2008).

Carnaby's cockatoo may utilise the area under application given the presence of Banksia species, however it is unlikely that it will constitute significant habitat for this species. The area under application is immediately surrounded by a number of large parcels of Crown land which contain vegetation in equal or better condition.

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

The applicant has made a commitment to retain the top soil from the application area and use it to revegetate a 3.5 hectare area of cleared land adjacent to the application area. The revegetation of this previously cleared area will provide foraging habitat for Carnaby's cockatoo.

#### Methodology

References:

DEC (2007-)

GIS Database:

- Pre European Vegetation
- SAC Biodatasets accessed November 2012

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

#### Comments

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

No rare flora has been recorded within the local area (10km radius).

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

#### Methodology

GIS Database:

- Pre European Vegetation
- SAC Biodatasets accessed November 2012

## (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 threatened ecological communities (TEC) have been recorded within the local area (10km radius).

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

#### Methodology

GIS Database:

- Pre European Vegetation
- SAC Biodatasets accessed November 2012

## (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 at variance to this Principle

The area under application is located within the Esperance Plains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 51 per cent of its Pre European vegetation extent remaining (Government of Western Australia, 2011).

The application area is mapped as Beard Vegetation Association 6048. This vegetation association has approximately 13 per cent of it's pre-European extent remaining in the Esperance Plains bioregion (Government of Western Australia, 2011).

Digital imagery (Esperance Causeway 50cm Orthomosaic - Landgate) indicates that the local area (10km radius) retains approximately 15 per cent vegetation.

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).

The local area and Beard Vegetation Association retain less than the nationally recommended threshold level.

The proposed clearing is at variance to this principle.

Avoid and minimise measures and the requirement to retain topsoil and rehabilitate an adjacent area of previously cleared land (approximately 3.5 hectares) will assist in offsetting the loss of the 3.3 hectares of vegetation proposed to be removed under this application.

Pre-European	Current Extent	Remaining Extent	in DEC N	lanaged Lands
STRANT BOOK STAND DATE.	(ha)	(ha)	(%)	(%)
IBRA Bioregion*				
Esperance Plains	2 899 950	1 489 289	51	54
Shire*				
Shire of Esperance	4 459 701	3 187 495	71	30
Beard Vegetation Associatio	n in Bioregion*			
6048	113 689	14 978	13	27

#### Methodology

References:

Commonwealth of Australia (2001) Government of Western Australia (2011)

#### GIS Database:

- Esperance Causeway 50cm Orthomosaic Landgate
- Pre European Vegetation

## (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 have been mapped within the application area. Digital imagery (Esperance Causeway 50cm Orthomosaic - Landgate) indicates that there is a watercourse located approximately 100 metres south west of the application area.

The closest wetland is a perennial lake which is located in Shark Lake Nature Reserve which is located approximately 450 metres west of the application area.

Lake Warden System (RAMSAR Wetland) is located approximately 4km south.

Given the above, the application is not likely to be at variance to this principle.

## Methodology

GIS Database:

- Hydrogeology, Linear
- RAMSAR

## (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 area under application has been mapped as soil type Xd1 which Northcote et al (1960 - 1968) describes as 'Gently undulating plain or plateau at low elevation with small granitic hills, some flats, seasonal swamps and talus; and some more strongly undulating land where dissection has begun: chief soils are sandy neutral yellow mottled soils'.

Rain fall in the Esperance region is approximately 600mm per annum. The topography of the site is relatively flat. Given the relatively low rainfall and low topography water erosion is unlikely to result from the proposed clearing.

The risk of wind erosion occurring on the mapped soil type is low.

The area immediately surrounding the application to the north, south and west is vegetated, therefore buffering the application from winds and further reducing the risk of wind erosion.

The proposed clearing is not likely to result in appreciable land degradation and is not likely to be at variance to this principle.

#### Methodology

References:

Northcote et al. (1960-68)

## GIS Database:

- Pre European Vegetation
- SAC Biodatasets accessed November 2012
- Topographic Contours, Statewide

# (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

Shark Lake Nature Reserve is located approximately 350m west of the application area and Lake Warden Nature Reserve is approximately 4km south.

The proposed clearing does not constitute an ecological linkage between these reserves.

Given the distance to the closest conservation reserve it is unlikely that the proposed clearing will impact upon the environmental values of these reserves.

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

#### Methodology

GIS Database:

- DEC Tenure

# (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

The groundwater salinity within the application area is 3000 - 7000 milligrams per litre of Total Dissolved Solids. This level of groundwater salinity is considered to be moderately saline to saline. The area immediately surrounding the application to the north, south and west is well vegetated, therefore reducing the risk of increased groundwater salinity.

There are no watercourses mapped within the application area. Therefore surface water is not likely to be affected by the proposed clearing.

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

#### Methodology

GIS Database:

- Groundwater Salinity, Statewide
- Hydrogeology, Linear

## (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 3.3 hectares of vegetation within a relatively low rainfall area is not likely to increase the incidence or intensity of flooding.

The application is not likely to be at variance to this principle.

#### Methodology

GIS Database:

- Annual Rainfall, Statewide
- Topographic Contours, Statewide

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

#### Comments

The applicant has advised that the proposed vehicle wash and liquid waste facility will be a 'closed loop' system, with final disposal being to an evaporation pond, resulting in no discharge into the environment (GHD, 2012).

Works approval has been applied for and assessment is complete. Works approval is likely to be issued as soon as the land tenure is secured.

As the proprietor of Lot 1885, the Department of Regional Development and Lands (DRDL) has no objections to the Shire application for a clearing permit (DRDL, 2012). It has been advised that DRDL is progressing the reservation of the Lot 1885 for the purpose of 'Vehicle Wash and Liquid Waste Facility' (DRDL, 2012). The Shire of Esperance will be granted a Management Order over the reserve (DRDL, 2012).

The area under application falls with the Esperance Groundwater area which is an area proclaimed under the Rights in Water and Irrigation Act 1914. Approval to abstract groundwater may be required for the purpose of this application. It is the applicant's responsibility to contact the Department of Water in order to obtain any relevant approvals.

A native title claim exists over the area under application. The Esperance Nyungar Native Title Claimants and their representative body have been notified of the clearing application.

The application area is within the Bukenerup Road Aboriginal Site of Significance. The applicant will be notified of their responsibilities under the Aboriginal Heritage Act 1972.

No public submissions have been received in relation to this application.

#### Methodology

Reference:

DRDL (2012) GHD (2012)

#### GIS Database:

- Aboriginal Sites of Significance
- ICMS, polygons
- Local Government Authorities
- RIWI, Groundwater Areas

## 4. References

- DEC (2007 ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: http://naturemap.dec.wa.gov.au/. Accessed November 2012
- GHD (2012) Shire of Esperance. Report for Myrup Liquid Waste Facility. Clearing Permit Supporting Documentation.

  Prepared by GHD Pty Ltd for the Shire of Esperance, May 2011 (DEC Ref: A558515).
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- 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.
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- 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.
- Shire of Esperance (2012) Myrup Road Truck Wash. Flora Survey Report. Esperance, Western Australia (DEC Ref: A558515).
- Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (Calyptorhynchus latirostris) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.

## 5. Glossary

Meaning
Biodiversity Coordination Section of DEC
Department of Conservation and Land Management (now BCS)
Department of Agriculture and Food
Department of Environment and Conservation
Department of Environmental Protection (now DEC)
Department of Environment
Department of Industry and Resources
Declared Rare Flora
Environmental Protection Policy
Geographical Information System
Hectare (10,000 square metres)
Threatened Ecological Community
Nater and Rivers Commission (now DEC)