



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 2097 / 2  
File Number: DEC4531  
Duration of Permit: From 4 January 2009 to 4 January 2014

### PERMIT HOLDER

Forshaw Pastoral Company Pty Ltd

### LAND ON WHICH CLEARING IS TO BE DONE

LOT 39 ON PLAN 238417 (EIGHTY MILE BEACH 6725)

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 50 hectares of native vegetation within the area hatched yellow on attached Plan 2097/2.

### CONDITIONS

#### 1. Weed control

- (a) 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
  - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* or species permitted for planting under a Pastoral Diversification Permit which are growing within the area hatched red on attached Plan 2097/2.

#### 2. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:

- (a) the species composition, structure and density of the cleared area;
- (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (c) the date that the area was cleared; and
- (d) the size of the area cleared (in hectares).

#### 3. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 2 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 3 October 2013, the Permit Holder must provide to the CEO a written report of records required under condition 2 of this Permit where these records have not already been provided under condition 3(a) of this Permit.

## DEFINITIONS

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

*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;

*weed/s*, for the purpose of this permit, means a species listed in Appendix 3 of the *Environmental Weed Strategy* published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*, excluding those species permitted for planting under a Pastoral Diversification Permit, issued by the Department of Planning and Infrastructure.



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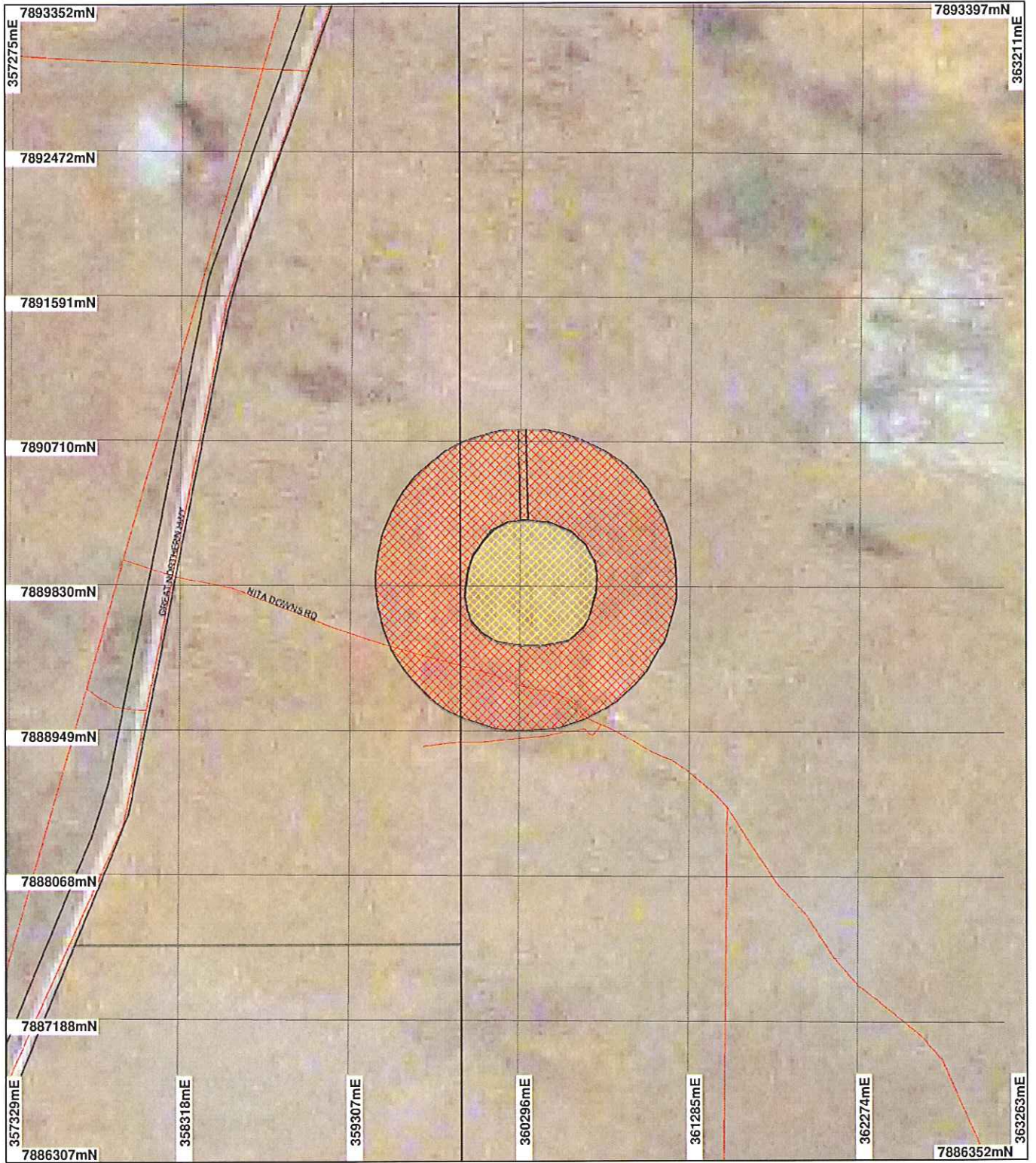
Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

6 August 2009



# Plan 2097/2



## LEGEND

Clearing Instruments  
 Road Centrelines  
 Cadastre  
 Western Australia Landsat  
 Mosaic 25m - AGO 2006



Scale 1:32519  
 (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.

*[Signature]* Date 6/8/09  
 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 acknowledged by the agency acronym in the legend.



Department of Environment and Conservation

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 2097/2  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Forshaw Pastoral Company Pty Ltd

### 1.3. Property details

Property: LOT 39 ON PLAN 238417 ( EIGHTY MILE BEACH 6725)  
LOT 39 ON PLAN 238417 ( EIGHTY MILE BEACH 6725)

Local Government Area: Shire Of Broome

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
50		Mechanical Removal	Grazing & Pasture
		Mechanical Removal	Grazing & Pasture

## 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
Beard Vegetation Association 699: Shrublands, pindan; Acacia eripoda shrubland with scattered low bloodwood (Eucalyptus dichromophloia) and Eucalyptus setosa over soft, curly spinifex on sandplain (Hopkins et al, 2001).	The proposed clearing is for 50 ha for a centre pivot-irrigated pasture (50ha) of Rhodes Grass (Chloris gayana).  The area is used for pastoral purposes and has been grazed by cattle and experienced historical clearing.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the vegetation under application was obtained from the application form and supporting documentation (DEC TRIM Ref: DOC32916).

## 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 within the proposal area is comprised of a single, relatively uniform community represented by Beard Vegetation Association 699 (Shepherd, 2006; Hopkins et al, 2001). The vegetation on-site is Pindan shrubland consisting of Acacia and Eucalypt species over Spinifex grasses (Hopkins et al, 2001). This vegetation type occurs throughout the immediate vicinity of the local area, and the application area has experienced degradation from cattle grazing and historical clearing. The area under application is therefore considered to be in good condition as the vegetation under application has been significantly altered by obvious signs of multiple disturbances but retains basic vegetation structure (Keighery, 1994).

Adjacent to the application area in the south is a crop of buffel grass. The application area comprises a greater level of biological diversity in comparison, even though it is likely that escapees from the buffel crop have entered the application area. However, areas on all other sides surrounding the application area have experienced similar degradation and contain similar species composition, therefore the application area contains a similar level of biological diversity.

Given the extensive range of similar habitat within the surrounding area as that under application, the proposed clearing of 50 ha of vegetation is unlikely to have a significant impact on the biodiversity of the area.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology** Hopkins et al (2001)  
Keighery (1994)  
Shepherd (2006)

GIS Database:  
- Environmental Impact Assessments  
- Clearing Regulations - Environmentally Sensitive Areas  
- System 1-5 and 7-12 Areas

**(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**

There are 6 records of vulnerable and priority fauna within a 50km radius of the applied area.

The habitat under application is well represented in the surrounding area, and given the impacts experienced by current grazing pressure and the likelihood of buffel grass intrusion, the vegetation is not likely to be significant habitat for native fauna in the local area.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology** SAC Biodatasets - accessed 01/12/2008

**(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**

There are no known records of rare flora within a 50km radius of the areas proposed to be cleared.

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

**Methodology** SAC Biodatasets - accessed 01/12/2008

**(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**

There are no known records of Threatened Ecological Communities within 50km of the applied area.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology** SAC Biodatasets - accessed 01/12/2008

**(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 area applied to clear is a component of Beard Vegetation Association 699 (Shepherd, 2006; Hopkins et al, 2001).

None of this vegetation association is known to occur within any IUCN Class I-IV or DEC managed reserves (Shepherd et al, 2001).

There is approximately 99.9% of the pre-European extent remaining for this vegetation type (Shepherd et al, 2001) and the local area (10km radius) is well vegetated with approximately 85% vegetation cover.

The clearing of 50 ha is not likely to be at variance to this principle as the area under application is not significant in a well vegetated local area.

**Methodology** Hopkins et al (2001)  
Shepherd et al (2001)  
Shepherd (2006)

GIS database:  
- Pre-European Vegetation - DA 01/01



**(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**

The application area is located approximately 8 km east of Mannerie Swamp and approximately 12km north east of a second swamp system.

The applied area is also approximately 15.5km east of the Ramsar listed Eighty Mile Beach.

As the application area is outside all of the recommended buffer zones for these wetlands (DoW, 2006) and given that none of the vegetation under application is riparian, it is not likely that the vegetation applied to clear is growing in, or in association with, an environment associated with a watercourse or wetland.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology DoW (2006)**

GIS Databases:

- RAMSAR, Wetlands - CALM 14/02/03
- ANCA, Wetlands - CALM 08/01
- Hydrography, linear - DOE 1/2/04
- Hydrography, linear (hierarchy) - DOW

**(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 is located within the Nita Land System (Speck et al, 1964). The soils are deep red sandy Pindan soils with good drainage and the landscape is considerably flat with slight undulations (DAFWA, 2007). The proposal area currently experiences grazing pressure, and the Department of Agriculture and Food WA (2007) advises the proposed clearing is unlikely to cause appreciable land degradation.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology Speck et al (1964)  
DAFWA (2007)**

GIS Database:

- Soils statewide DA 11/99

**(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**

The application area is located 15km east of the Ramsar listed Eighty Mile Beach however the Register of National Estate has designated additional conservation areas related to Eighty Mile Beach which extend to 12km west of the application area.

Given that the application area is not within the recommended buffer zones (DoW, 2006) for this wetland and given the distance from Eighty Mile Beach to the application area, it is not likely that the clearing of 50 ha of native vegetation will impact on this conservation area.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology DoW (2006)**

GIS Databases:

- CALM Managed Lands and Waters - CALM 1/07/05
- CALM proposed 2015 pastoral lease exclusions

**(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 proposal area is within the Canning Kimberley Groundwater sub area, proclaimed under the Rights in Water and Irrigation (RIWI) Act 1914. There are no Public Drinking Water Source Areas within a 50 km radius and the nearest drainage line is approximately 8.9 km north west of the proposal area.

The area under application is located within the Nita Land System (Speck et al, 1964). The soils are deep red

sandy Pindan soils with good drainage and the landscape is considerably flat with slight undulations (DAFWA, 2007), therefore any wet season run off is unlikely to result in sedimentation of surface water.

The area under application is reported to have low levels of total soluble salts in the water table (DAFWA, 2007); therefore clearing of 50 ha of vegetation is not likely to deteriorate the quality of underground water through salinisation.

Given that the area under application is approximately 8.9km from the nearest drainage line and taking into account the soil and topography of the land, it is unlikely that the clearing as proposed will cause a deterioration in the quality of surface or underground water.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology** Speck et al. (1964)  
DAFWA (2007)

GIS Database;  
- Public Drinking Water Source Areas (PDWSA)  
- Hydrography, 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 area under application is located within the Nita Land System (Speck et al, 1964). The soils are deep red sandy Pindan soils with good drainage and the landscape is considerably flat with slight undulations (DAFWA, 2007).

DAFWA (2007) advises that flooding is only short term during high rainfall events due to the porosity of the soil of the applied area.

The low gradients, a lack of defined drainage channels and heavy seasonal rainfall can cause sheet flooding in the area however the clearing as proposed is not likely to exacerbate the known incidence or intensity of flooding occurring within the application area during high rainfall events (wet season).

Therefore this proposal is not likely to be at variance to this Principle.

**Methodology** Speck et al (1964)  
DAFWA (2007)

GIS Database;  
- Topographic Contours, Statewide  
- Hydrography, linear

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

**Comments**

The proposal is to clear 50 hectares for the purpose of installing a centre-pivot irrigation system and planting of the fodder species Rhodes grass (*Chloris gayana*). The land is currently under a pastoral lease. The pastoral property is not subject to any 2015 Pastoral lease exclusions.

The Pastoral Lands Board has granted a Pastoral Diversification Permit for the proposed fodder activity. The permit allows the establishment and irrigation of Rhodes grass, and also the harvesting of the fodder prior to seed maturity for feeding cattle across the station, or for sale.

Rhodes grass is a non-indigenous potential fodder species in Western Australia and is known to have a wide tolerance to a range of climatic conditions. (Natural Resources and Water, 2006) The aggressive growing characteristics have resulted in this species being listed as an environmental weed (Hussey et al., 2007). The highly mobile ability of the seeds and the quantity of seeds produced during seeding (Natural Resources and Water, 2006) may result in escapees from the area under application.

Advice from Department of Agriculture and Food Western Australia indicated that, based on trials conducted with Rhodes grass in the Northern Territory, this species is unlikely to persist away from the irrigation area on Nita Downs station due to the low fertility of the soil and the low annual rainfall in the area. (Trim Ref DOC57541).

The proponent has provided details of the management of Rhodes grass and 'escapees', in conjunction with the conditions listed on the Pastoral Diversification Permit. These include:

- \* harvesting of fodder prior to seed maturity for sale or as feed across the station;
- \* establishment of a weed monitoring system over the permit area and a 500m buffer.



(Trim Ref DOC57107)

Weeds are to be removed from the buffer area as per the condition placed on the permit. No native species are to be cleared within this buffer zone.

The proposed activity requires the installation of a bore for irrigation, for which the proponent has obtained a licence from the Department of Water. The proponent has also obtained a groundwater licence to operate the bore, issued by the Department of Water for 100,000Kl/a until such time as the full water allocation (520,000Kl/a) can be justified (DOC68986).

There is one native title claim over the area under application. The proposal constitutes a future act under the Native Title Act 1993 for which notification has been given. An objection to the proposal has been raised by the representative body on behalf of the claimants. Trim Ref DOC39560 and DOC 52398

The environmental issues raised in this submission have been addressed under the appropriate clearing principles. The historical and stocking issues raised are outside the scope of the clearing legislation and are relevant to the granting of a Pastoral diversification permit.

The Shire of Broome Interim Development Order No. 3 classifies land uses associated with the pastoral industry as a permissible activity and therefore the proposed purpose does not require approval from the shire.

The applicant has applied to amend clearing permit CPS 2097/1 to include other crop species authorised for planting. No changes to the assessment of this proposal have occurred as a result of this amendment request.

#### Methodology

GIS Databases:

- Native Title Claims - DLI
- Aboriginal Sites of Significance
- Environmental Impact Assessments

## 4. Assessor's comments

#### Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance to any of the clearing principles.

## 5. References

- DAFWA (2007) Land degradation assessment report. Advice to Assessing Officer, Native Vegetation Assessment Branch, received 21/11/2007. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DEC TRIM Ref: DOC40061
- Department of Water (2006) Water Quality Protection Note 6: Vegetation Buffers to Sensitive Water
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Hussey, B.M.J., Keighery, G.J., Dodd, J., Lloyd, S.G. and Cousens, R.D. (2007) Western Weeds: A Guide to the Weeds of Western Australia. Second Edition. The Weeds Society of Western Australia, Department of Agriculture and Food Western Australia, Department of Environment and Conservation.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Natural Resources and Water (2006) Facts Pest Series: Rhodes grass *Chloris gayana*. Land Protection PP91 QNRM05560. Queensland Government.
- 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Speck, N.H., Wright, R.L. and Rutherford, G.K. (1964) Part II Land Systems of the West Kimberley Area. In: General Report on lands of the West Kimberley Area, W.A. Land Research Series No. 9. Commonwealth Scientific and Industrial Research Organization, Australia.

## 6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
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)