GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4501/1
File Number: DEC13509-1
Duration of Permit: 14 November 2011 to 14 November 2013

PERMIT HOLDER

Gogo Station Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

PART LOT 68 ON PLAN 238022 (ST GEORGE RANGES 6728)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 723 hectares of native vegetation within the area hatched yellow on attached Plan 4501/1.

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 500m of the area hatched yellow on attached Plan 4501/1.

2. Vegetation management

The Permit Holder shall not clear native vegetation within 30 metres of the riparian vegetation of any watercourse or wetland within and/or adjacent to the area cross-hatched yellow on Plan 4501/1.

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;

riparian vegetation has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

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 197,* including those species permitted for planting under a Pastoral Diversification Permit, issued by the Department of Regional Development and Lands.

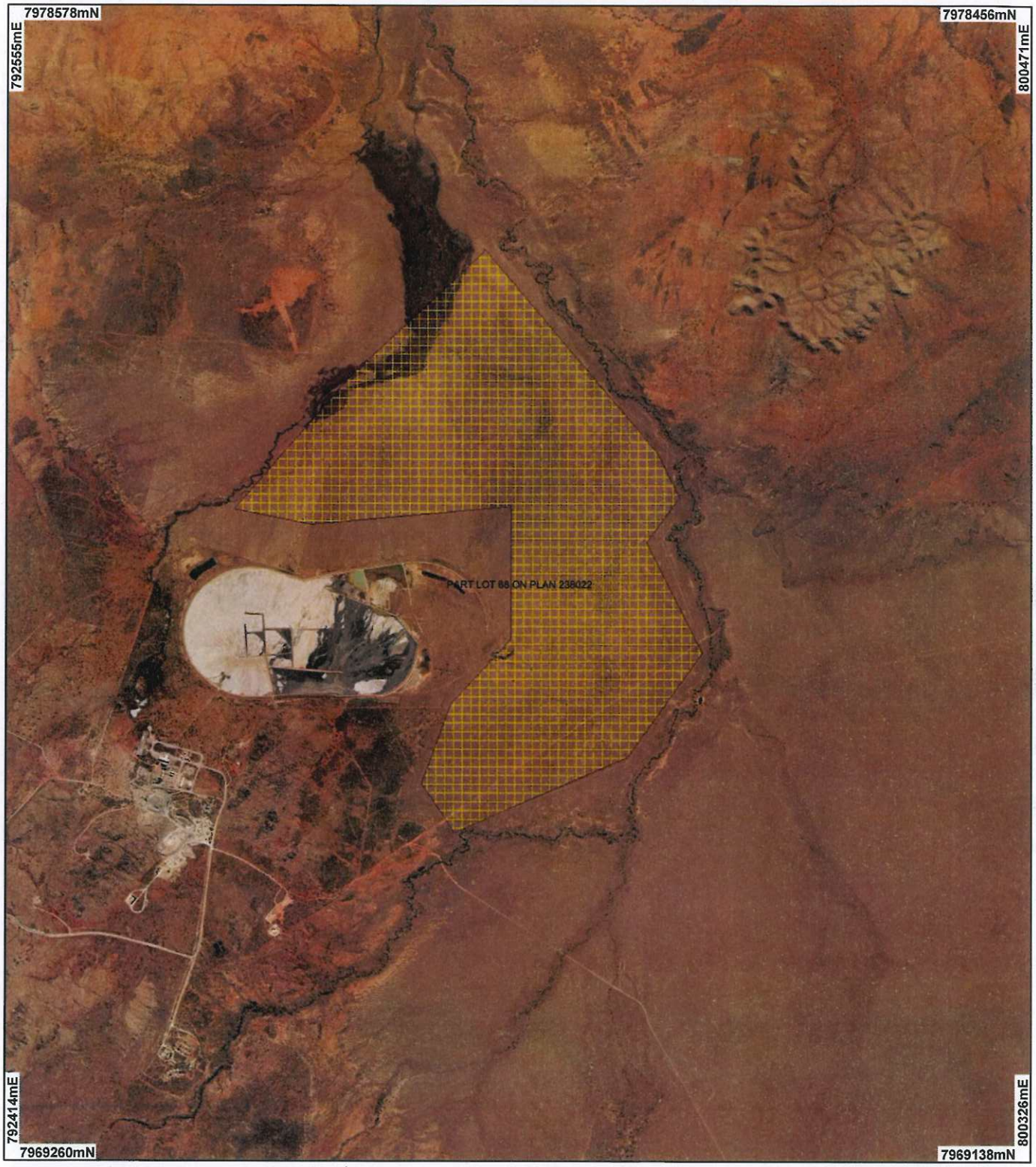
watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

21 October 2011

Plan 4501/1



LEGEND

Clearing Instruments

Areas Approved to Clear

Cadastre for labelling

Fitzroy Crossing 80cm Orthomosaic - Landgate 2007

N

0 ~1.25 km

Scale 1:43185
(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.

..... Date 21/10/11

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

Our environment, our future

** Project Data. This data has not been quality assured. Please contact map author for details.*

Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4501/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Gogo Station Pty Ltd

1.3. Property details

Property: PART LOT 68 ON PLAN 238022 (ST GEORGE RANGES 6728)
PART LOT 68 ON PLAN 238022 (ST GEORGE RANGES 6728)
Local Government Area: Shire Derby West Kimberley
Colloquial name: Gogo Station

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
723		Mechanical Removal	Pastoral Diversification

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 21 October 2011

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 in the application are is described as: Beard vegetation association 706 Napier Hills South is described as grasslands, tall barunch grass savanna, mitchell and ribbon/blue grass (Shepherd 2007).	The application is to clear 723 hectares of native vegetation within Gogo Station, Lot 68 on Diagram 238022, St George Ranges, for the purpose of pastoral diversification. The applicant is proposing to farm rain grown cattle fodder. The application area consists of d overstorey of Acacia suberosa over Acacia farnesiana over a grassland of Chrysopogon fallax, Dichanthium fecundum, Astrebla pectinata and Aristida latifolia (DAFWA 2011).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation condition and type were assessed during a site inspection undertaken by the Department of Agriculture and Food (DAFWA 2011). Aerial photography was used for confirmation.

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 application is to clear 723 hectares of native vegetation within Gogo Station for the purpose of pastoral diversification.

The vegetation within the application area is mapped as Beard Vegetation Unit 706 (grasslands, tall bunch grass, savanna mitchell and ribbon/blue grass) (Shepherd, 2007). A site inspection notes that specifically, the application area contains a scattered overstorey of Acacia suberosa over Acacia farnesiana over a grassland of Chrysopogon fallax, Dichanthium fecundum, Astrebla pectinata and Aristida latifolia with small amounts of Panicum decompositum (Commissioner 2011).

The vegetation was rated to be in good (Keighery 1994) condition (DAFWA 2011). It is also noted that the

application area is normally grazed by cattle and is subject to the occasional dry season fire (DAFWA 2011).

There are no rare flora species or Threatened Ecological Communities (TECs) within the local area (30km radius). There are 5 priority flora species recorded within the local area with Cullen candidum (P1) being recorded within and Cayratia cardiophylla (priority 2) being within 15km from the application area.

The proposal includes vegetation in association with a minor non-perennial watercourse.

The local area is highly vegetated (approximately 85%) and the vegetation type of the application area is well represented (approximately 99.5% of pre-European extent remaining) therefore the vegetation under application is not likely to be significant as habitat for any fauna indigenous to Western Australia.

The disturbances within the application area indicate that the biological diversity is not considered to be higher than other areas of native vegetation in the local area. The application is not likely to be at variance with principle (a).

Methodology References
Commissioner (2011)
Keighery (1994)

GIS Databases:
Pre European Vegetation
SAC Biodatasets (accessed August 2011)

(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 11 fauna of conservation significance recorded within a 30km radius.

The closest recorded conservation fauna is located 2.5km northwest and is a mollusc, Westraltrachia recta. As little of the habitat requirements for these species is known (Solem, 1981) and this species occurs within the local area (30km radius), it is considered that the area under application may be habitat for this mollusc species.

The local area is highly vegetated (approximately 85%) and the vegetation type is well represented (approximately 99.5% of pre-European extent remaining) therefore while the vegetation under application may provide some habitat for native fauna it is not likely to be significant as habitat in a local context.

The application is not likely to be at variance with principle (b).

Methodology References:
Solem (1981)

GIS Databases:
Pre European Vegetation
SAC Biodatasets (accessed August 2011)

(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 rare flora species recorded within a 40km radius of the application area. No detailed surveys of the application area for rare flora were conducted.

The clearing as proposed is not likely to be at variance to this principle as no rare flora have been recorded within the application or local area.

Methodology GIS Databases:
SAC Biodatasets (accessed August 2011)

(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 (TECs) were mapped within a 40km radius of the application area. No detailed surveys of the application area for TECs were conducted. The vegetation under application does not share similar composition characteristics with any known TEC.

Therefore the clearing as proposed is not likely to be at variance with principle (d) as the vegetation under

application is not part or whole of, nor necessary for the maintenance of any TECs.

Methodology GIS Databases:
SAC Biodatasets (accessed August 2011)

(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 vegetation in the application area is located in the Napier Hills South vegetation association of which 99% is remaining in the Dampierland bioregion (Shepherd 2009). Should the clearing be granted, the calculated percentage of this vegetation association remaining as 99%.

The application area is in a good (Keighery 1994) vegetation condition (Commissioner 2011). Aerial photography indicates that local area is highly vegetated (approximately 85%).

The vegetation under application is not likely to be significant as a remnant of vegetation in a highly cleared landscape. The application is not likely to be at variance with principle (e).

Methodology Reference
Commissioner (2011)
Keighery (1994)
Shepherd (2009)

GIS Database:
Fitzroy Crossing 80cm Orthomosaic ? Landgate 2007
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 at variance to this Principle**
The application ranges from 50m to 100m from Blariyaning Creek, a first order major non-perennial watercourse which runs from the north to the southeast of the application area .

Another minor, non-perennial watercourse is located along the northern and western edges of the application area. Approximately 600m of the length of this watercourse deviates into the application area. Impacting the river system by removing riparian vegetation may alter the course of the waterway (DEC 2011). Aerial imagery of the watercourse vegetation indicates that water pools in low lying areas causing floodplain areas.

The Department of Water (2011) have advised that no proclaimed watercourses are located within the area under application.

No wetlands have been mapped in the application area. However, DEC (2011) advise that the area under application is located on a floodplain.

A Pilbara mine site which ceased operations contains a tailings dam which is located 400m south and east of the application area.

As the area under application includes riparian vegetation growing in association with a minor non-perennial watercourse the clearing as proposed is at variance to principle (f).

Methodology References
DoW (2011)
DEC 2011)

GIS Database:
Fitzroy Crossing 80cm Orthomosaic ? Landgate 2007
Hydrography linear
Rivers
Soils, Statewide

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

Comments **Proposal may be at variance to this Principle**
The application is located on black soils units of the Fossil and Neillabublica land systems (Speck et al (1964) with dark, self mulching clays and black sand (Commissioner 2011).

Due to this soil type there would be some risk to wind erosion with clearing. However the land is to be cleared prior to the wet season which should minimise the time the soil is exposed reducing the land degradation risk (Commissioner 2011). It should be noted that the land has been previously cleared in the area for cropping with no issues (Commissioner 2011)

Salinity has previously been identified within the application area as part of another clearing application (CPS 2431/1). However, forage crops have been grown nearby the application area and were unaffected by salinity. Salinity may be occur in the application area due to the nearby old coral reef system causing land degradation (Commissioner 2011).

The annual rainfall of the area under application is approximately 600mm with an annual evapotransporation rate of approximately 500mm. As most of the rain falls in the wet season and the soils of the application area have a moderate to high water storage capacity seasonal waterlogging may occur.

Due to the potential for salinity, wind erosion and waterlogging the application to clear may cause appreciable land degradation. The application may be at variance with principle (g).

Methodology

References:
Commissioner (2011)
Speck et al (1964)

GIS Database:
Soils, Statewide
Rainfall, Mean Annual
Evapotranspiration, Areal Actual

(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 area under application is 22km south of Geikie Gorge, a Conservation and National Park also registered as part of the Register of National State and System 7.

Given the distance between the application area and Geikie Gorge the clearing as proposed is not likely to impact on the environmental values of this conservation area. The clearing as proposed is not likely to be at variance to principle (h).

Methodology

GIS Database:
DEC Tenure
Register of National Estate
System 1- 5 and 7-12 Areas

(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 may be at variance to this Principle

The application is located on flat land with a slope of less than 1% (Commissioner 2011). Any runoff from the clearing that may occur during heavy rain would enter Bariyaning Creek located 50m away and would flow north (Commissioner 2011).

As the application is proposed to clear prior to the wet, which would minimise the soil time exposed, the rise of wind erosion causing sedimentation in the waterways is low (DAWFA 2011).

However, clearing of the native vegetation associated with the minor watercourse in the application area may cause direct erosion leading to sedimentation and deteriorated surface water quality of this watercourse and its surrounding floodplain.

Clearing of the native vegetation may case deterioration in the quality of surface or underground water particularly associated with the minor watercourse and its floodplain. The application area may be at variance with principle (i).

Methodology

References:
Commissioner (2011)

GIS Databases:
Fitzroy Crossing 80cm Orthomosaic ? Landgate 2007
Hydrography linear
Rivers

Soils, Statewide

(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 application area is on a plain and consists of self-mulching clays. This type of soil has been identified as having moderate to high water storage capacity. In the wet season the cracks in the soils will allow water to infiltrate easily however as the soil becomes wetter in the wet season it will become less porous and some flooding short term is possible (Commissioner 2011).

The annual rainfall of the area under application is approximately 600mm with an annual evapotransporation rate of approximately 500mm.

Due to the presence of soil with a moderate to high water storage capacity, the clearing is not likely to cause or exacerbate the incidence or intensity of flooding that is already occurring during the wet season. The application is not likely to be at variance with principle (j).

Methodology

References
Commissioner (2011)

GIS Database:
Soils, Statewide
Rainfall, Mean Annual
Evapotranspiration, Areal Actual

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

Comments

The application is to clear 723 hectares of native vegetation within Crown Lease 398-810, Part Lot 68 on Plan 238022, St Georges Ranges for the purpose of pastoral diversification. The applicant has advised that it is proposed to farm rain grown cattle fodder at Gogo Station.

The applicant has previously submitted applications to clear within Gogo Station for different sizes and purposes; CPS 3443/1 and 3390/1 were withdrawn and refused respectively.

The Kimberley Land Council has advised that the proposed clearing constitutes a future act and are objecting on the grounds that the future act will seriously impact on the rights and interests of the Native Title Group (KLC 2011). The applicant has been advised of this matter and has advised DEC that discussions will occur with the necessary groups.

The Pastoral Lands Board (PLB) has been informed of the application. The applicant has advised that an application to PLB has been submitted. DEC has also advised PLB of the Commissioners (2011) concern that land degradation will occur at the end of the period of continuous cropping when the seed reserves of the native vegetation in the soil is depleted due to the establishment of annual species and loss of productive palatable perennial grasses. Land degradation issue post land use is not applicable to the assessment to clear native vegetation and is more applicable to the capability assessment of the land to produce dryland cropping. DEC (2011) notes that a drainage management plan may be required to avoid environmental impacts associated with the waterlogging and erosion of the floodplain caused by the development of the land. This plan should be managed through the pastoral diversification process.

The Department of Water has advised that the area under application is within the proclaimed Rights in Water and Irrigation Act 1914 (RIWI) Canning-Kimberley groundwater area and Fitzroy River and Tributaries surface water area. As the application is for rain-fed pasture, a licence is not required (DoW 2011). DoW also note that no proclaimed watercourses are located in the application area (DoW 2011).

No advice was received by the Shire of Derby/West Kimberley. Previous advice from the Shire regarding an application in the same property indicates that the Shire is supportive of the initiative of the pastoralist (Shire 2009).

DEC received a request for details on the application from the Conservation Council of WA and advised that all the information regarding the application is publicly available on the FTP site (Ref A418910).

Methodology

References
Commissioner (2011)
DEC (2011)
DoW (2011)
KLC (2011)
Shire (2009)

GIS Databases:

Clearing Instruments
Hydrography liner
RIWI

4. References

Commissioner of Soil and Land Conservation (2011); Land Degradation Advice and Assessment Report for clearing permit application CPS 4501/1 received 25/08/2011; Department of Agriculture and Food Western Australia (A424689).

DEC (2011) Direct Interest Submission for clearing permit application CPS 4501/1. Received 16/09/2011. West Kimberley District. Department of Environment and Conservation, Western Australia.

DoW (2011) Direct Interest Submission for clearing permit application CPS 4501/1. Received 17/08/2011. Kimberley Region. Department of Water, 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.

KLC(2011) Direct Interest Submission for clearing permit application CPS 4501/1. Received 22/8/2011. Kimberley Land Council and Gooniyandi Native Title Group, Western Australia.

Shepherd, D.P. (2009) 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.

Shire of Derby West Kimberley (2009) Direct Interest Submission for clearing permit application CPS 3443/1. Received 10/12/2009. Shire of Derby West Kimberley, Western Australia.

Speck et al (1964) General Report on Lands of the West Kimberley Australia. Land Research Series No. 9. CSIRO Western Australia.

5. 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)