



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3516/1
Permit Holder:	Forshaw Pastoral Company Pty Ltd
Duration of Permit:	26 September 2010 – 26 September 2015

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 pivot irrigation and horticulture.

2. Land on which clearing is to be done

LOT 39 ON PLAN 238417 (EIGHTY MILE BEACH 6725)

LOT 41 ON PLAN 238418 (EIGHTY MILE BEACH 6725)

3. Area of Clearing

The Permit Holder must not clear more than 350 hectares of native vegetation within the area hatched yellow on attached Plan 3516/1.

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. 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

6. 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:

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

7. 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*:
 - clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - 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 500m buffer of each pivot and/or horticulture area.

PART III - RECORD KEEPING AND REPORTING

8. 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).

9. 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 8 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 14 July 2015, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9(a) of this Permit.

Definitions

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

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.

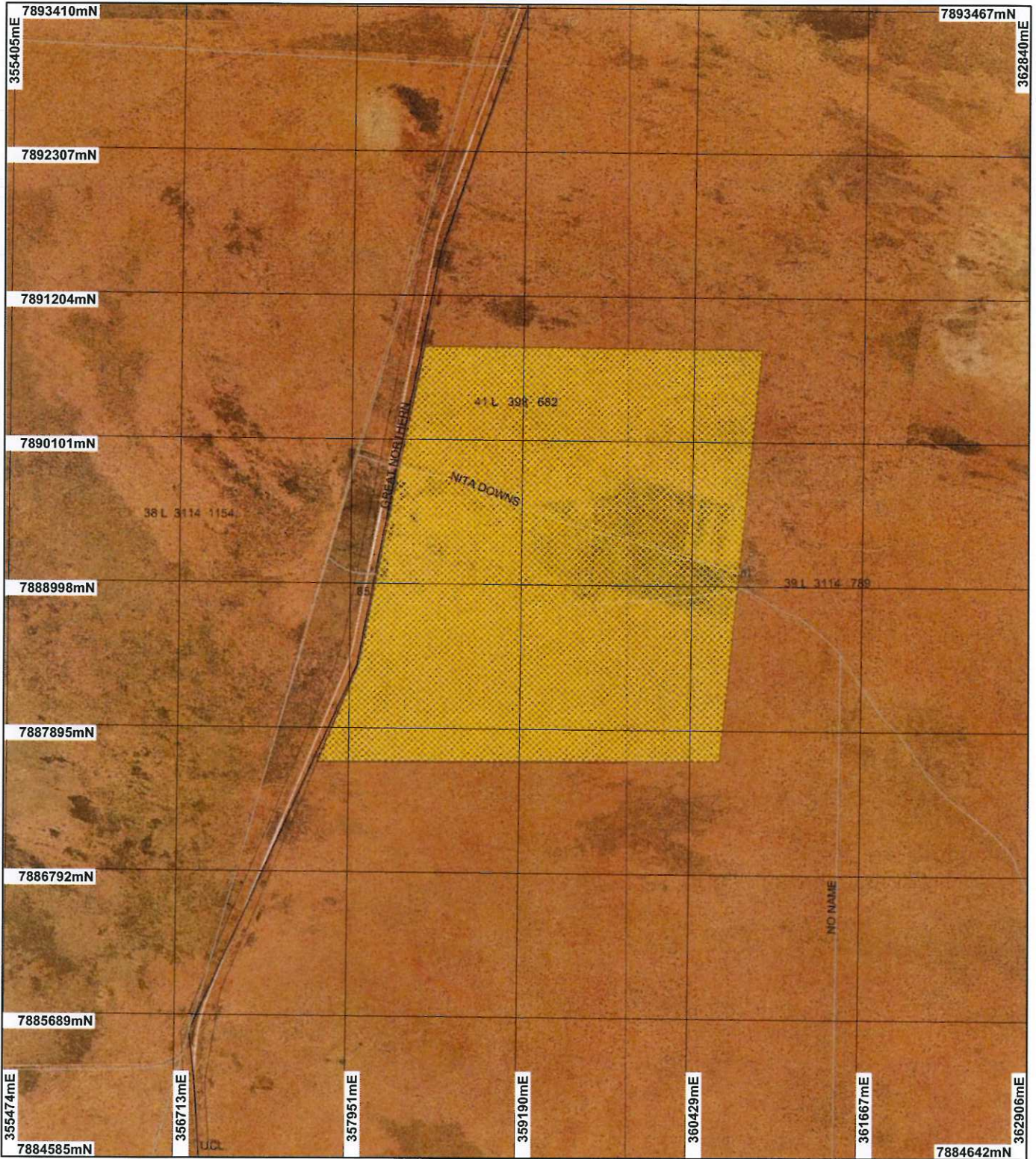


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

26 August 2010

Plan 3516/1

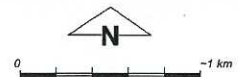


LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO (cont)

- LRS
- MR
- N
- TR
- Clearing Instruments**
- Areas Approved to Clear

Phire 50cm Orthomosaic - Landgate 2004



Scale 1:40732
(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 for measurement inaccuracies.

[Signature] Date 26/8/09
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.: 3516/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Forshaw Pastoral Company Pty Ltd

1.3. Property details

Property: LOT 41 ON PLAN 238418 (EIGHTY MILE BEACH 6725)
LOT 39 ON PLAN 238417 (EIGHTY MILE BEACH 6725)

Local Government Area:

Colloquial name:

1.4. Application

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

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 350 ha for centre pivot-irrigated pasture (220ha) and Horticultural activities (130ha). 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 aerial photography and a 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 within the proposal area is comprised of a single, relatively uniform community represented by Beard Vegetation Association 699 (Shepherd, 2007; Hopkins et al, 2001). The vegetation on-site is Pindan shrubland consisting of Acacia and Eucalypt species over grasses (Hopkins et al, 2001; DEC, 2010). This vegetation type occurs throughout the immediate vicinity and the application area has experienced degradation from cattle grazing and historical clearing (DEC, 2010). The area under application is in very good to good (Keighery, 1994) condition as the vegetation under application is significantly altered by multiple disturbances but retains basic vegetation structure (DEC, 2010).

Buffel grass is known to occur within the application area, and is known to spread rapidly through areas once it has invaded (DEC, 2010).

The application area comprises a lower biological diversity in comparison to other areas adjacent to the application area as it has been previously grazed and historically cleared.

An extensive range of similar habitat exist within the local area (50km radius), in similar or better condition to the applied area.

The vegetation under application is not likely to have a high level of biodiversity when compared with vegetation in the local area.

Given the above it is the assessment recommendation that the proposal is not likely to be at variance to this Principle.

Methodology References:
DEC (2010)
Hopkins et al (2001)
Keighery (1994)
Shepherd (2007)

GIS Database:
SAC Biodatasets accessed 19 January 2010
Pre European Vegetation - DA 01/01 NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 5 records of vulnerable and priority fauna within a 50km radius of the applied area.

A site inspection identified various birds (common to area), reptiles including the Military Dragon and skinks however no significant habitat values (ie habitat trees) were identified (DEC, 2010).

The habitat under application is well represented in the surrounding area, and given the impacts experienced by current grazing pressure and the presence of buffel grass on site (DEC, 2010), the vegetation is not likely to be significant habitat for native fauna in the local area.

Given the above it is the assessment recommendation that the proposal is not likely to be at variance to this Principle.

Methodology References:
DEC (2010)

GIS Database:
SAC Biodatasets accessed 19 January 2010

(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.

Given the above it is the assessment recommendation that the proposal is not likely to be at variance to this Principle.

Methodology GIS Database:
SAC Biodatasets accessed 19 January 2010

(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.

The vegetation under application is relatively uniform across the local area and does not represent any characteristics of a known TEC.

Given the above it is the assessment recommendation that the proposal is not likely to be at variance to this Principle.

Methodology GIS Database:
SAC Biodatasets accessed 19 January 2010

(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).

There is approximately 99.9% of the pre-European extent remaining for this vegetation type statewide and within the Dampierland Bioregion (Shepherd, 2007) and the local area (50km radius) is well vegetated with approximately 85% native vegetation cover.

Given the above the assessment recommendation is that the clearing of 350 ha is not likely to be at variance to this principle as the area under application is not significant and falls within a well vegetated area.

Methodology References:
Hopkins et al (2001)
Shepherd (2007)

GIS database:
Interim Biogeographic Regionalisation of Australia - EA 18/10/00
Local Government Authorities - DLI 8/07/04
Pre European Vegetation - DA 01/01
NLWRA, Current Extent of Native Vegetation 20 Jan 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

The closest surface water expression area is located approximately 4.8km west of the applied area, being an area subject to inundation.

The applied area is also approximately 14 km 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 (DEC, 2010), 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.

Given the above it is the assessment recommendation that the proposal is not likely to be at variance to this Principle.

Methodology References:
DEC (2010)
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 (Commissioner of Soil and Land Conservation, 2007; DEC, 2010).

The proposal area currently experiences grazing pressure, and the Commissioner of Soil and Land Conservation (2010) advises that the proposed clearing on this property is unlikely to cause appreciable land degradation.

Given the above the assessment recommendation is that the proposal is not likely to be at variance to this Principle.

Methodology References:
Commissioner of Soil and Land Conservation (2007)
Commissioner of Soil and Land Conservation (2010)
DEC (2010)
Speck et al (1964)

GIS Database:
Hydrogeology, statewide DOW 13/07/06
Salinity Risk LM 25m - DOLA 00
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 approximately 14km 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 approximately 11km west of the application area.

Given that the application area is not within the recommended buffer zones (200m) (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 350 ha of native vegetation will impact on any nearby conservation area.

Given the above, the assessment recommendation is that the proposal is not likely to be at variance to this Principle.

Methodology References:
DoW (2006)

GIS Databases:

DEC Managed Lands and Waters DEC 1/07/05

Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

SAC Biodatasets accessed 18 January 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

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 surface water expression area is approximately 4.8 km west of the application 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 (Commissioner of Soil and Land Conservation, 2010; DEC, 2010), 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 (Commissioner of Soil and Land Conservation, 2010); therefore clearing of 350ha of vegetation is not likely to deteriorate the quality of underground water through salinisation.

Given that the area under application is approximately 4.8 km from the nearest surface water expression area and taking into account the soil and topography of the land, it is considered that the proposal is unlikely to cause deterioration in the quality of surface or underground water.

Methodology References:
Commissioner of Soil and Land Conservation (2010)
DEC (2010)
Speck et al. (1964)

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 (Commissioner of Soil and Land Conservation, 2010; DEC, 2010).

Commissioner of Soil and Land Conservation (2010) 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 observations noted on site suggest the Pindan soils on site are well draining (DEC, 2010).

Given the above the assessment recommendation is that the clearing as proposed is not likely to exacerbate the known incidence or intensity of flooding.

Methodology References:
Commissioner of Soil and Land Conservation (2010)
DEC (2010)
Speck et al (1964)

GIS Database;
Topographic Contours, Statewide
Hydrography, linear

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

Comments

The proposal is to clear 350 hectares for the purpose of pivot irrigation and horticulture. 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 (DOC117898).

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. As there is an absence of any known watercourses within the applied area and given the need for irrigation of this species on site, it is unlikely that Rhodes grass will successfully establish away from the controlled activities. The assessment recommendation is that a weed management condition be placed on the permit to manage potential spread of this species.

Advice from the Commissioner of Soil and Land Conservation 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 previously provided details of the management of Rhodes grass and 'escapees' on Nita Downs station, 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).

The applicants currently have a clearing permit (CPS 2097/2) within the applicant area for 40ha pivot irrigation. A licence from the Department of Water has been granted for this area for 520,000Kl/a. This licence expired in June 2010 and the applicant has applied for an amendment to this licence to extend the expiry date and also for an increased water licence for 4GL (DOC116622). The Department of Water is planning to approve the increase water licence in stages, with stage 1 for 100 000Kl issued on 17 August 2010. In addition, a staged development plan has been granted which the applicants will be required to adhere to, to receive the remaining allocation (up to 4GL) for Nita downs station.

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 (DOC118134). 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.

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.

Methodology GIS Databases:
Native Title Claims - DLI
Aboriginal Sites of Significance
Environmental Impact Assessments

4. References

Commissioner for Soil and Land Conservation (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

Commissioner for Soil and Land Conservation (2010) Land degradation assessment report. Advice to Assessing Officer, Native Vegetation Assessment Branch, received 24/02/2010. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DEC TRIM Ref: DOC120433

DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3516/1, Nita Downs Station Lot 41 on Plan 238418 and Lot 39 on Plan 238417. Site inspection undertaken 02/02/10. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC118434).

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.

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

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.

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.

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)