



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1137/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: EDL NGD (WA) Pty Ltd

### 1.3. Property details

Property: LOT 75 ON PLAN 213140 ( CAMBALLIN 6728)  
LOT 243 ON PLAN 220268 ( CAMBALLIN 6728)  
MYROODAH-LULUIGUI ROAD RESERVE  
Local Government Area: Shire Of Derby-West Kimberley  
Colloquial name: Myroodah-Luluigui Rd, Lot 243 on Plan 220268, Vol LR3010 Fol 534

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.8		Mechanical Removal	Industrial

## 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 64: Grasslands, tall bunch grass savanna low tree; boab ( <i>Adansonia gregorii</i> ), bauhinia ( <i>Bauhinia cunninghamii</i> ) & beefwood ( <i>Grevillea striata</i> ) over ribbon grass ( <i>Chrysopogon</i> spp.) (Hopkins et al, 2001).	The vegetation of the site contains an under storey of grasses and a mid storey of shrubs. The area does not look to have experienced much degradational influences, however fire and grazing are prevalent in the general area (EDL NDG (WA) Pty Ltd (2006).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description of the vegetation under application was obtained from a consultant's report containing site photos (DoE TRIM Ref: KNI1446)
Beard Vegetation Association 699: Shrublands, pindan; <i>Acacia eripoda</i> shrubland with scattered low bloodwood ( <i>Eucalyptus</i> spp.) and rough leaf bloodwood ( <i>Eucalyptus setosa</i> ) over soft ( <i>Triodia Pungens</i> ) & curly spinifex ( <i>Triodia bitextura</i> ) on sandplain (Hopkins et al, 2001).			
Beard Vegetation Association 702: Hummock grasslands, grass steppe; winged spinifex ( <i>Triodia intermedia</i> ) (Hopkins et al, 2001).			

## 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 combination of Beard Vegetation Associations 64, 699 and 702 (Hopkins et al, 2001) within the proposal area creates a biologically diverse environment. Species likely to be present include a variety of understorey bunch grasses, ribbon grasses and spinifex and a midstorey of boabs, Bauhinia, Grevilleas and Acacias.

However, as the area proposed to be cleared is 1.8 hectares, only a small amount of each Beard Vegetation Association is to be removed. This will be 0.32 hectares of 64, 1.37 hectares of 699 and 0.11 hectares of 702. This small loss from each Association is not likely to significantly impact the biological diversity of the local area. Additionally, the three Associations are well represented in the surrounding local area, which contains very low levels of development activity.

No Declared Rare and Priority Flora, Threatened Fauna or Threatened Ecological Communities were located within the site proposed for clearing (EDL NDG (WA) Pty Ltd, 2006).

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

**Methodology** Hopkins et al (2001);  
EDL NDG (WA) Pty Ltd (2006);  
GIS Databases:  
- Declared Rare and Priority Flora List - CALM 01/07/05  
- Threatened Fauna - CALM 30/09/05  
- Threatened Ecological Communities - CALM 12/4/05

**(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 no known Threatened Fauna within the area proposed to be cleared.

A desktop survey located the closest known Threatened Fauna approximately 5 kilometres to the north east of the area applied to clear. These are five Priority 4 bird species that were identified during day sightings.

The proponent will implement a Flora and Fauna Management Procedure to prevent any impacts on fauna within the development area. This commenced with the surveying of the site under application to identify any protected species of flora and fauna, of which none were identified within the area to be cleared (EDL NDG (WA) Pty Ltd, 2006). Other management practices include fencing the construction area to prevent fauna movement into the disturbance area and immediately contacting local wildlife rescue services should any fauna be injured (EDL NDG (WA) Pty Ltd, 2006).

The clearing of 1.8 hectares of vegetation from the proposal area is not likely to significantly impact on the fauna species of the area, priority or otherwise, due to the small area to be cleared and the large distances between the proposal area and the priority species. The implementation of the Flora and Fauna Management Procedure will significantly reduce any impacts on the fauna of the local area. Additionally, the areas surrounding the proposal site are well vegetated and undisturbed which will provide habitat for any fauna displaced during the clearing process.

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

**Methodology** EDL NDG (WA) Pty Ltd (2006);  
GIS Databases:  
- Threatened Fauna - CALM 30/9/05

**(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**

A flora survey did not locate any Declared Rare or Priority Flora within the area proposed to clear (EDL NDG (WA) Pty Ltd, 2006), and a desktop survey failed to locate any within a 50 kilometre radius of the area.

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

**Methodology** EDL NDG (WA) Pty Ltd (2006);  
GIS Databases:  
- Declared Rare and Priority Flora List - CALM 01/07/05

**(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**

A flora survey did not locate any Threatened Ecological Communities within the area proposed to clear (EDL NDG (WA) Pty Ltd, 2006), and a desktop survey failed to locate any within a 50 kilometre radius of the area.

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

**Methodology** EDL NDG (WA) Pty Ltd (2006);  
GIS Database:  
- Threatened Ecological Communities - CALM 12/4/05

**(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 combination of Beard Vegetation Associations 64, 699 and 702 (Hopkins et al, 2001). None of these three Associations are located within any IUCN Class I-IV Reserves (Shepherd et al, 2001). There is approximately 100% of the pre-European extent of each Association remaining, which indicates they are highly represented in their natural environment. Therefore, these Associations are of least concern for biodiversity conservation (Department of Natural Resources and Environment, 2002).

It is not likely that the proposed clearing of 1.8 hectares is going to excessively reduce the remaining extent of these three vegetation Associations.

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

**Methodology** Department of Natural Resources and Environment (2002);  
Hopkins et al (2001);  
Shepherd et al (2001);  
GIS Databases:  
- 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 Fitzroy River lies approximately 8 kilometres to the south of the area applied to clear. Additionally the proposal area is surrounded by Jarran Creek, approximately 2.5 kilometres to the north, and Uralla Creek, approximately 3.5 kilometres to the east and south. Both creeks are major tributaries to the Fitzroy River. The Camballin Floodplain is located approximately 4 kilometres to the east of the proposal area.

There is the potential for siltation to occur in adjacent drainage areas resulting from water erosion on the site. However the proponent will implement a Surface Water and Soil Erosion Management Plan which involves the installation of a site drainage system to prevent erosion and avoid siltation of the surrounding areas (EDL NDG (WA) Pty Ltd, 2006).

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

**Methodology** EDL NDG (WA) Pty Ltd (2006);  
GIS Databases:  
- Hydrography, linear (hierarchy) - DOE 13/4/05  
- Register of National Estate - EA 28/01/03

**(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 clearing is likely to be blade down, resulting in the removal of all root systems that would potentially prevent land degradation.

However, the soils of the area are typically shallow, stony and sometimes gravelly (Northcote et al, 1960-68), which will persist against erosion. The proponent will implement a Surface Water and Soil Erosion Management Plan which involves the installation of a site drainage system to prevent erosion and avoid siltation of the surrounding areas (EDL NDG (WA) Pty Ltd, 2006).

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

**Methodology** Northcote et al (1960-68);  
EDL NDG (WA) Pty Ltd (2006);  
Application form;  
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 at variance to this Principle**

A desktop survey failed to locate any conservation areas within a 50 kilometre radius of the area proposed to clear.

Therefore, the proposal is not at variance to this Principle.

**Methodology** GIS Database:  
- CALM Managed Lands and Waters - CALM 1/07/05

**(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 located within the Canning-Kimberley Groundwater Subarea and the Fitzroy River and Tributaries Surface Water Catchment Area, proclaimed under the *Rights in Water and Irrigation Act 1914*. Jarran Creek lies approximately 2.5 kilometres to the north and Uralia Creek lies approximately 3.5 kilometres to the east and south. The Public Drinking Water Source Protection Area, consisting of P1, P2 and P3 protection zones, lies 4 kilometres to the north east of the proposal area.

Due to the large distances between the application area and the tributaries, and the small size of the proposed clearing, it is unlikely that the proposal will impact on the water quality of the groundwater within or around the Public Drinking Water Source Protection Area or the surface water of the surrounding creeks.

Additionally, the proponent will implement a Surface Water and Soil Erosion Management Plan to further reduce the potential for degradation of the water quality of the area (EDL NDG (WA) Pty Ltd, 2006).

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

**Methodology** EDL NDG (WA) Pty Ltd (2006);  
GIS Databases:  
- Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06  
- RIWI Act, Surface Water Areas - WRC 18/10/02  
- RIWI Act, Groundwater Areas - WRC 13/06/00  
- Hydrography, linear (hierarchy) - DOE 13/4/05

**(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**

Flooding occurs seasonally over the December to March period, where the flood height and duration are lengthy and extreme. The proposal area is outside the Camballin Floodplain area, therefore the clearing of 1.8 hectares of vegetation is not likely to increase the incidence or intensity of these naturally occurring flood events.

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

**Methodology** GIS Database:  
- Rainfall, Mean Annual - BOM 30/09/01  
- Register of National Estate - EA 28/01/03

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

**Comments**

Western Power holds a lease over the power station site and easement access, and EDL NDG (WA) Pty Ltd are authorised to construct the power station. The proposal area is zoned Public Purposes - Power Station. The road reserve is vested in the Shire of Derby-West Kimberley and planning permission has been given to access the road reserve.

There is one Native Title claim over the area under application by the Nyikiina Mangala people (WC99-025). As the lease has been granted and the proposed activity complies with the land zoning, the granting of a clearing permit does not constitute a future act under the *Native Title Act 1993*.

There are 7 Aboriginal Sites of Significance within the area proposed to clear. These are: Liveringa (ID 18329); Liveringa (ID 21261); Walangari (ID 18330); Walangari Camp (ID 18331); Langka-Langka (ID 21260); Yapawanti (ID 21249); Libirrin-Birrin (ID 20499).

It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of

Aboriginal Significance are damaged through the clearing process.

The construction and operation of the power station do not require a Works Approval or Licence under the *Environmental Protection Act 1986*.

Water is not required for the operation of the power station, however is required for ablution facilities and emergency showers. This water will be trucked to the facility from off site sources, therefore a Water Licence under the *Rights in Water and Irrigation Act 1914* is not required.

The area under application has been subject to two referrals to the Environmental Protection Authority. However, both referrals are not related to the proposal under assessment.

**Methodology** GIS Databases:  
- Native Title Claims - DLI 7/11/05  
- Aboriginal Sites of Significance - DIA  
- Environmental Impact Assessments - DOE 24/02/06

#### 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Industrial	Mechanical Removal	1.8	Grant	Assessable criteria have been addressed and no objections were raised. The proposal was found to be not at variance for principle h and found not likely to be at variance for principles a, b, c, d, e, f, g, i and j.  The Assessing Officer therefore recommends that the permit should be granted.

#### 5. References

- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- EDL NDG (WA) Pty Ltd (2006) Supporting Information for Land Clearing Permit Application. Looma Power Station West Kimberley Power Project Looma, Western Australia. Revision 1. DOE TRIM Ref: KNI1446.
- 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P., 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.

#### 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)