



1. Application details

1.1. Permit application details

Permit application No.: 1136/1
Permit type: Area Permit

1.2. Proponent details

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

1.3. Property details

Property: PART LOT 4 ON PLAN 207047 (HALLS CREEK 6770)
Local Government Area: Shire Of Halls Creek
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.6		Mechanical Removal	Building or Structure

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 871 Mosaic Grasslands, curly spinifex, low tree savanna: <i>Eucalyptus brevifolia</i> (snappy gum) over <i>Triodia bitextura</i> (curly spinifex) / Hummock grasslands, grass steppe, <i>Triodia wiseana</i> (hard spinifex) (Hopkins et al. 2001);	The vegetation of the site contains an understorey of grasses and an over storey of Eucalypts. Site photos show previous impacts from fire, and aerial images indicate two tracks dissect the application area. Overall, disturbance is quite minimal	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 and aerial photos (DoE TRIM Ref KNI1452).

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 at the site is comprised of a single, relatively uniform community, represented by Beard Vegetation Association 871 (Hopkins et al. 2001). Species likely to be present include *Eucalyptus brevifolia* (snappy gum) over *Triodia bitextura* (curly spinifex) or *Triodia wiseana* (hard spinifex) (Hopkins et al. 2001). This community type is illustrated by site photos of the area under application (EDL NGD (WA) Pty Ltd. 2006). The area has experienced minor degradation from vehicle tracks and fire damage.

This Vegetation Association is representative of the undeveloped area adjacent to the proposal site in the north, east and south, and degrading pressures are similar to that within the application area. The loss of vegetation within the application area is therefore not likely to significantly reduce the biodiversity of the local area, so the proposal is not likely to be at variance to this principle.

Methodology

Hopkins et al (2001);
EDL NGD (WA) Pty Ltd (2006)

(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

A desktop survey found there were no known Threatened Fauna within the area proposed to be cleared

A desktop survey indicated the possibility of the following Threatened Fauna existing within a 10 km radius of the proposal area

- *Erythrura gouldiae* (Golden Finch) Endangered - preferred habitat of grassy flats and trees near water, tall vegetation along watercourses, drier woodlands and scrublands in the wet season (Pizzey, 2003)
- *Rostratula Australis* (Painted Snipe) Vulnerable - preferred habitat of fringes of swamps, dams, marshy areas with grass cover (Pizzey, 2003).
- *Dasyurus hallucatus* (Northern Quoll) Endangered - preferred habitat of rocky eucalypt woodlands (Menkhorst & Knight, 2004).
- *Macrotis lagotis* (Greater Bilby) Vulnerable - preferred habitat of acacia shrublands with hummock grasslands (Menkhorst & Knight, 2004).

These species are all listed under the *Environment Protection and Biodiversity Conservation Act 1999*.

The proposed clearing is not likely to impact upon these species of conservation significance, as the type of vegetation to be cleared is not the preferred habitat of these priority listed fauna.

The clearing of 3.6 hectares of vegetation is not likely to significantly impact the fauna of the area, priority or otherwise, due to the small area proposed to be cleared. Additionally, areas surrounding the site are well vegetated and undisturbed which will provide habitat for any fauna displaced during the clearing process.

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

It is also recognised that the proponent will implement a Flora and Fauna Management Procedure. Procedures include fencing the construction area to prevent fauna movement into the site and immediately contacting local wildlife rescue services should any fauna be injured (EDL NDG (WA) Pty Ltd, 2006).

Methodology www.deh.gov.au;

Pizzey (2003);

Menkhorst & Knight (2004);

EDL NDG (WA) Pty Ltd (2006);

GIS Database;

- 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 desktop survey found there were no Declared Rare or Priority Flora within the area proposed to be cleared (EDL NDG (WA) Pty Ltd, 2006), nor within a 50km 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;

- 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 desktop survey found there were no known Threatened Ecological Communities within the area proposed to be cleared (EDL NDG (WA) Pty Ltd, 2006), nor within a 50km 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 component of Beard Vegetation Association 871 (Hopkins et al. 2001). None of this Association is located within any IUCN Class I-IV Reserves (Shepherd et al. 2001). There is 246,091 hectares of this Association remaining, approximately 99% of the pre-European extent (Shepherd et al. 2001) which indicates it is well represented in the natural environment. Therefore, this Association is of least concern for biodiversity conservation (Department of Natural Resources and Environment, 2002).

Clearing of 3.6 hectares of vegetation will not significantly reduce the remaining extent of this Association, therefore the proposal is not likely to be at variance to this principle.

Methodology Hopkins et al (2001);
Shepherd et al (2001);
Department of Natural Resources and Environment (2002);
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 Elvire River is located 1km north of the area proposed to be cleared, and meanders around the town to 1km east of the site. Due to the size of the proposed clearing, the distance to the river and the location of the town site between the river and the proposal area, it is unlikely that the clearing will impact upon the river. Therefore this proposal is not likely to be at variance to this principle.

It is noted that the proponent will implement a Surface Water Management Plan which involves the installation of a site drainage system to prevent uncontrolled, off-site water movement in relation to the construction and ongoing processes of the proposed power station (EDL NDG (WA) Pty Ltd, 2006).

Methodology EDL NDG (WA) Pty Ltd (2006);
GIS Databases:
- Hydrography, linear (hierarchy) - DOW
- RAMSAR, Wetlands - CALM 14/02/03
- ANCA, Wetlands - CALM 08/01

(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 currently stabilise soils and prevent erosion. The main landform within the application area is rocky ridges of metamorphic rocks, with virtually no soil or some shallow dense loamy soils (Northcote et al. 1960-68). This soil type has a low potential for erosion (Schoknecht, 2002). Therefore the proposed clearing is not likely to cause appreciable land degradation.

It is noted that the proponent will implement a Soil Erosion Management Plan which involves the installation of a site drainage system to prevent erosion in relation to the construction and ongoing processes of the proposed power station (EDL NDG (WA) Pty Ltd, 2006).

Methodology Northcote et al (1960-68);
Schoknecht (2002);
EDL NDG (WA) Pty Ltd (2006);
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**
A desktop survey did not locate any conservation reserves within the area proposed to be cleared (EDL NDG (WA) Pty Ltd, 2006), nor within a 50km 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:
- 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 is located within the Canning-Kimberley Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914*. The Elvire River is located 1km north of the proposal site, and meanders around the town to 1km east of the site. The Public Drinking Water Source Protection Area, consisting of P1, P2 and P3 protection zones, lies approximately 700m east of the area.

Due to the size of the proposed clearing, the distances to the river and Public Drinking Water Source Protection Area and that the town site and airport are located between the proposal area and these two features, it is not likely the clearing will cause deterioration in the quality of surface or underground water.

It is also noted that the proponent will implement a Surface Water Management Plan which involves the installation of a site drainage system to prevent uncontrolled, off-site water movement in relation to the construction and ongoing processes of the proposed power station (EDL NDG (WA) Pty Ltd, 2006).

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

(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 flood height and duration are lengthy and extreme. The clearing of 3.6 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

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

Comments
No objections were lodged against the clearing proposal.

Western Power owns the land and sub-leases it to EDL NDG (WA) Pty. The land is zoned for Airport and Power Station uses and is consistent with the current Town Planning Scheme

There are no Native Title claims over the area under application

There are no recorded Sites of Aboriginal Significance over the area under application.

Water is not required for the construction of the power station, however is required for ablution facilities and emergency showers. This water will be sourced from the main town supply, therefore a Water Licence issued under the *Rights in Water and Irrigation Act 1986* is not required.

A Works Approval covering the same area under application has been issued for the construction of the power station. A Licence will be required prior to operation of the power station, issued under the *Environmental Protection Act 1986*

The area under application has been subject to three referrals to the Environmental Protection Authority. One of these referrals is not related to the proposal under assessment. The other two referrals apply to the power station, however both referrals were not assessed (CRN 211072, CRN 169718). The public advice issued noted that the commitments made in the referral document should be adhered to by the proponent. Those commitments relevant to the clearing process include:

- * Acquire a native vegetation clearing permit from the Department of Environment (now Department of Environment and Conservation) as applicable.

- * Incorporate permit requirements and guidelines into the Construction EMP, to minimise impacts of clearing activities on site.

- * As part of the Construction EMP, prepare and implement procedures for:

- i) prevention of disturbance to flora and fauna outside the site; and

- ii) reporting and investigation of any disturbance incidents.

The proponent has adhered to these commitments and the assessment of this clearing application has included the review of the Construction EMP. Therefore the proposal is not at variance to the Environmental Protection Authority's advice. Additionally, other commitments contained within the Construction EMP have been assessed during the processing of the Works Approval.

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
Building or Structure	Mechanical Removal	3.6	Grant	Assessable criteria have been addressed and no objections were raised. The proposal was found not likely to be at variance to all principles, supported by the proposed implementation of the following internal management plans: <ul style="list-style-type: none"> ▪ Flora and Fauna Management Plan • Soil and Groundwater Management Plan • Surface Water and Soil Erosion Management Plan. The Assessing Officer therefore recommends the proponent adhere to these Plans, as specified in Energy Developments (2006) West Kimberley Power Project Construction Environmental Management Plan 2060-STD-00-PC-001 Revision C.

The Assessing Officer recommends that the permit should be granted.

The applicant will be required to obtain a licence under the *Environmental Protection Act 1986* prior to commencing operations of the power station.

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. Halls Creek Power Station West Kimberley Power Project Halls Creek Western Australia. Revision 1. DOE TRIM Ref. KNI1452

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.

Menkhurst, P. and Knight, F. (2004) A Field Guide to the Mammals of Australia. Second Edition. Oxford Publishers.

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.

Pizzey, G. (2003) A Field Guide to the Birds of Australia. Collins Publishers.

Schoknecht, N. (2002) Soil Groups of Western Australia. A simple guide to the main soils of Western Australia. Resource Management Technical Report 246. Edition 3.

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)