



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1692/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Department of Planning and Infrastructure (DPI)

### 1.3. Property details

Property: LOT 2483 ON PLAN 40678 (KUNUNURRA 6743)  
Colloquial name:

### 1.4. Application

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

## 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 901: Grasslands, high grass savanna woodland; stringybark and woollybutt over upland tall grass and curly spinifex (Hopkins et al, 2001).	The area under application is in good condition, retaining a dense understorey of grasses and an upper storey of stringybark. The western end of the area to be cleared has been previously disturbed from the installation of fire breaks and the use of trail bikes.  The works involve re-contouring the current drainage line and re-aligning it to connect to a drainage reserve to increase water holding capacity, thereby preventing flooding of surrounding industries and properties.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description of the vegetation to be cleared was obtained during a site visit by DEC staff on 12 December 2006.

## 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 901 (Hopkins et al, 2001). Species likely to be present include Stringybark and woollybutt over upland tall grass and curly spinifex (Hopkins et al, 2001).

The eastern side of the drainage line, at the upstream end, has been subject to degradation via fire breaks and bike tracks. Due to these impacts, which separate the drainage line from the adjacent Mirima National Park, it is unlikely that the proposal area contains a high biodiversity in comparison to other areas within Mirima National Park.

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

**Methodology** Hopkins et al (2001);  
Clearing Permit Application;  
GIS Database:  
- Pre-European Vegetation - DA 01/01

**(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**

Although the area proposed to be cleared may contain habitat for some threatened fauna the habitat type that supports these species is not limited to the site proposed for clearing and is extensively represented in the local and wider area.

The clearing of 0.03 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.

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

**Methodology** GIS Database:

**(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 Declared Rare or Priority Flora within a 10 km radius of the area of the area proposed to be cleared.

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

**Methodology** 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**

There are no known Threatened Ecological Communities within a 10 km radius of the area proposed to be cleared.

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

**Methodology** 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 State Government is committed to the national Objectives and Targets for Biodiversity Conservation, which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment, 2002).

The vegetation of the area applied to clear is Beard Vegetation Association 901 (Hopkins et al, 2001). Approximately 17.7% of this Association is located within IUCN Class I-IV Reserves (Shepherd et al, 2001). There is 4,750,841 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 0.03 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**

Lake Kununurra and the Ord River lie 2.8 km south of the proposal area, with the river meandering around the

township to 4.8 km west of the proposal area. Both are considered important wellands of Australia, and are Ramsar listed. The distance between the proposal area and the water bodies is considered an adequate separation distance to minimise any impacts. Additionally the town site and farming land are located between the two.

The proposed works are to increase the drainage ability of a minor, non-perennial drainage line. This watercourse is not recognised for particular conservation significance, and does not feed into other watercourses or wetlands. The works involve re-contouring the current drainage line and re-aligning it to connect to a drainage reserve to increase water holding capacity, thereby preventing flooding of surrounding industries and properties.

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

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

**(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 proposal area is comprised of rocky sandstone hills with gently undulating lower slopes with shallow and sandy soils (Northcote et al, 1960-68). These soils are susceptible to wind erosion, however their high permeability rate reduces potential of water erosion (Schoknecht, 2002).

The western end of the area proposed to be cleared has been previously disturbed from the installation of fire breaks and the use of trail bikes. The small area proposed to be cleared is not likely to increase land degradation significantly within the local area.

**Methodology** Northcote et al (1960-68);  
Schoknecht (2002);  
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 closest conservation area is the Mirima National Park, which comes within meters of the eastern side of the proposal area. The small scale of the clearing, 0.03 hectares, is not likely to impact upon the values of the conservation reserve.

Therefore, the proposal is not likely to be 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 sub-area, proclaimed under the *Rights in Water and Irrigation Act 1914*. The Public Drinking Water Source Protection Area, consisting of a P1 protection zone, is located 2.5 km south of the area.

Due to the distance to the Public Drinking Water Source Protection Area. It is unlikely that the proposal will cause deterioration in the quality of the groundwater.

The small area proposed to be cleared is not likely to decrease the quality of surface water.

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

**Methodology** GIS Database:  
- Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06

**(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 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 located on a sand plain at the foot of a rocky hill range, within a drainage line. The drainage line is currently susceptible to flooding, which results in flooding of industries and properties within the local area. The proposed activities are to re-contour the drainage line and re-align it with a drainage reserve, to increase its water holding capacity and prevent flooding.

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

**Methodology GIS Database:**

- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02
- Hydrography, linear (hierarchy) - DOW
- Hydrography, linear - DOE 1/2/04

**Planning Instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.**

**Comments**

The proposal area is unallocated Crown Land and managed by the Department of Planning and Infrastructure.

The Shire of Wyndham-East Kimberley has no objection to the proposed removal of vegetation. Additionally, a new subdivision proposal currently being drafted by the Shire plans to address the flooding issues on a permanent basis. The proposed works are consistent with this proposed subdivision.

The area under assessment has been subject to three previous referrals to the Environmental Protection Authority. None of these referrals are related to the proposal, however CRN 136082 is in relation to the Kununurra-Wyndham Area Development Strategy. The proposal is not at variance to this strategy.

There are no Native Title Claims over the area proposed to be cleared.

The proposal area occurs in an area that is covered by the following Registered Indigenous Heritage Sites - Mirima-Dumun.Gum (ID K02228); Kununurra Sacred Store (ID K00564) and Duguwiyang (ID K02245). 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 proposed works.

The proposed works are not listed as a Prescribed Premises under the *Environmental Protection Act 1986*, therefore no licences are required.

**Methodology GIS Databases:**

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

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Drainage	Mechanical Removal	0.03	Grant	Assessable criteria have been addressed and no objections were raised. The proposal was found not at variance to principle j and not likely to be at variance to all other principles.

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.
- 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.
- 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
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now DEC)
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 DoW)