



1. Application details

1.1. Permit application details

Permit application No.: 1777/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Bazmark Film II Pty Ltd

1.3. Property details

Property: LOT 709 ON PLAN 221418 (CAMBRIDGE GULF 6743)
 PART LOT 744 ON PLAN 92042 (LAKE ARGYLE 6743)
 Local Government Area: Shire Of Wyndham-East Kimberley
 Colloquial name: Reserve 1061

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		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
The vegetation of the area is grasslands with sparsely scattered trees of bauhinia and coolabah on the flats. The upland areas contain grasslands with a denser mid-storey of Eucalyptus pruinosa. River side areas contain grasslands with a moderately dense upper storey of Eucalyptus tetradonta and Corymbia bella (DEC, 2007).	The proposed clearing consists of 4 hectares for construction of a homestead, 4 hectares for construction of cattle yards and 2 hectares for a campsite for personnel. The three locations are on the lower flats of the proposal area, avoiding hilly areas and riparian areas.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the vegetation to be cleared was obtained during a site visit by DEC staff on 13 April 2007.

The area is located within a pastoral lease and has been highly degraded by cattle. This has resulted in the spread of weeds throughout the pastoral lease and within the proposal area. The weed species found include Hyptis suaveolens, Calotropis procera, Vachellia farnesia and Passiflora foetida.

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 proposal area consists of three different vegetation types. The flats contain grasslands with sparsely scattered trees of bauhinia and coolabah on the flats. The upland areas contain grasslands with a denser mid-storey of Eucalyptus pruinosa. River side areas contain grasslands with a moderately dense upper storey of Eucalyptus tetradonta and Corymbia bella (DEC, 2007). These vegetation types are common and widespread in the local area. The disturbance by cattle has caused a high occurrence of weed species in the area, resulting in the reduction of the vegetation condition. This disturbance has occurred across the pastoral lease, so the biodiversity of the area under application is similar to that of the local area.

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

Methodology DEC (2007)

(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

The following threatened fauna species are known to occur within a 10km radius of the proposal area:
Endangered - Crested Shrike-tit (*Falcunculus frontatus whitei*), Gouldian Finch (*Erythrura gouldiae*).

Vulnerable - Red Goshawk (*Erythrotriorchus radiatus*).

Specially Protected - Peregrine Falcon (*Falco peregrinus*)

Priority Listed - Yellow-rumped Mannikin (*Lonchura flaviprymna*) P1, Bush Stone Curlew (*Burhinus grallarius*) P4, Eastern Curlew (*Numenius madagascariensis*) P4.

Of the threatened fauna species recorded within the local area, only the Yellow-rumped Mannikin is a recent record (1996). The closest record of this species is approximately 5km north of the proposal area.

The preferred habitat of the Yellow-rumped Mannikin is riparian vegetation along rivers and irrigation channels and grassy flats with widely spaced shrubs and trees (Pizzey, 1980). The vegetation proposed to be cleared is not riparian, however does contain grassy flats.

The proposed clearing is quite small in relation to the extent of grassy flats in the local area. Additionally, the Yellow-rumped Mannikin is highly mobile therefore the area is not likely to be significant habitat for the bird.

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

Methodology Pizzey (1980);
SAC Bio Datasets 260407

(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 are no declared rare flora within a 10km radius of the proposal area.

The following priority flora species are known to occur within a 10 km radius of the proposal area:

Priority Flora - Goodenia brachypoda (P1), Echinochloa kimberleyensis (P1), Brachychiton tuberculatus (P3).

Due to Goodenia brachypoda having been located within 4.5km of the proposal area, it has the potential to occur on-site. Goodenia brachypoda is known to occur on red sandy loams (Florabase, 2007). Flat to gently sloping flood-plains within the proposal area consist of grey clays with small areas of brown clays. This area is not likely to contain Goodenia brachypoda. The hill within the proposal area consists of shallow, sandy, often stony soils together with shallow, often stony, loamy soils. This area could potentially contain Goodenia brachypoda, however the proposed clearing is not required on the hill slopes.

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

Methodology Florabase (2007);
SAC Bio Datasets 260407;
GIS Databases:
- Soils, Statewide - DA 11/99

(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 10km radius of the area proposed to be cleared.

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

Methodology SAC Bio Datasets 260407

(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 a current extent below 30% of the pre-European settlement extent (Department of Natural Resources and Environment, 2002).

The area applied to clear is a component of Beard Vegetation Associations 52, 59 and 814 (Hopkins et al, 2001). Association 52 is found on the hill top, and Association 814 is located on the hill slopes. The three areas proposed to be cleared are intended to be located on the flats, therefore neither of these two associations will be cleared.

Approximately 9.6% of Association 59 is located within the IUCN Class I-IV Reserves (Shepherd et al, 2001). There is 122,936 ha of this Association remaining, approximately 88.2% 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).

The vegetation within the proposal area that is Association 59 has been extensively degraded by cattle and contains a number of weed species. Combined with the large extent of this association remaining and the small amount of vegetation intended to be cleared, this vegetation is not significant as a remnant of native vegetation.

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 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 proposal area is located at the bottom of a hill and is dissected by minor, ephemeral drainage lines. There are a number of small areas that are subject to inundation, and the Ord River lies to the east of the proposal area.

These drainage lines and wetland areas are not identified as having significant environmental values. The proposed clearing will avoid areas of inundation and is not within the riparian zone of the Ord River.

The Parry Floodplain, an ANCA wetland area that is subject to inundation, is located approx 8km to the east of the proposal area. The proposed clearing of 10 hectares is not likely to impact on the wetland at such a distance.

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

Methodology GIS Databases:
- Hydrography, linear - DOE 1/2/04
- ANCA, Wetlands - CALM 08/01
- Ramsar, Wetlands - CALM 14/02/03

(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 proposal area consists of a hill slope and flat. The hill area consists of shallow, sandy, often stony soils together with shallow, often stony, loamy soils. This soil type has poor water holding capacity (free draining) and is unlikely to be subject to water or wind erosion (Schoknecht, 2002). The proposed clearing is not required on the hill slopes.

Flat to gently sloping flood-plains within the proposal area consist of grey clays with small areas of brown clays. This soil type has moderate water holding capacity so is unlikely to be subject to water or wind erosion (Schoknecht, 2002). The area has been subject to disturbance by cattle, however does not exhibit signs of erosion. Due to the resilience of the land, it is unlikely that the proposed clearing will cause an increase in land degradation.

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

Methodology 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**
There are no existing or proposed conservation reserves within a 10km radius of the proposal area.

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
- Proposed National Parks, FMP - CALM 19/03/03
- Agreement to Reserve (ATRs) - DA 1/02/05

(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 area, however the proposed activity will not interact with the groundwater. There are no gazetted surface water catchment areas and no Public Drinking Water Source Areas within a 10km radius of the proposal area.

A number of minor, ephemeral drainage lines and wetland areas dissect the proposal area. Due to the resilience of the soil types and the current impacts experienced by cattle grazing, the proposed clearing is not likely to cause further deterioration in the water quality of the drainage lines or wetland areas.

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

Methodology GIS Databases:
- RIWI Act, Groundwater Areas - DOW
- RIWI Act, Surface Water Areas - DOW
- Public Drinking Water Source Areas (PDWSA) - DoW 2007
- Hydrography, linear (heirarchy) - DOW 02/03/07
- ANCA, Wetlands - CALM 08/01

(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 over the December to March period, where flood height and duration are lengthy and extreme. The proposed clearing occurs on low-lying areas in close proximity to the Ord River. During flood events, this area is likely to be inundated for long periods of time. The clearing of 10 hectares is not likely to increase the incidence or intensity of flooding.

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

Methodology GIS Database:
- Rainfall, Mean Annual - BOM 02/03/07
- Topographic Contours, Statewide - DOLA 12/09/02
- Hydrography, linear - DOE 1/2/04

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

Comments
The area proposed to be cleared is located on Carlton Hill Pastoral Station and Crown Reserve 1061. The Department for Planning and Infrastructure have issued a non-exclusive licence granting permission to access the land for the purpose of Filming - Homestead Set.

The area under assessment has been subject to four previous referrals to the Environmental Protection Authority. None of these referrals relate to the proposal, however one is in relation to the Draft Kununurra-Wyndham Area Development Strategy (CRN 145595). The proposal is not at variance to this strategy.

The Shire of Wyndham-East Kimberley does not object to the proposal.

The proposed works are not listed as Prescribed Premises under the Environmental Protection Regulations 1987, therefore no licences or works approvals are required.

Water is not required for the proposal, therefore a water licence under the Rights in Water and Irrigation Act 1914 is not required.

There are two native title claims over the area proposed to be cleared by the Miriwung Gajerrong peoples. These claims were resolved during native title negotiations for the Ord Stage II Project.

The proposal area occurs in an area that is covered by the following Registered Indigenous Heritage Sites - Bulgulmirri (ID 12954) and Gunanurreng - Ord River (ID 15153). 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.

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

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	10	Assessable criteria have been addressed and no objections were raised. The proposal was found not likely to be at variance to all 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.
- Florabase (2007) <<http://florabase.calm.wa.gov.au>>
- 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., 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 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)

