



1. Application details

1.1. Permit application details

Permit application No.: 2168/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Derren Thomas Greenhill

1.3. Property details

Property: LOT 1 ON PLAN 49128 (ROEBUCK 6725)
Local Government Area: Shire Of Broome
Colloquial name: Buffalo Turf Farm

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Burning	Miscellaneous

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 750: Shrublands, pindan; Acacia tumida shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Hopkins et al, 2001).	The proposed clearing is 10 ha on leasehold land for the purpose of an irrigated turf farm. The area was previously used for melon farming, however the vegetation has since regrown. Historical disturbance has also been experienced from bushfires as recently as 2007.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description of the vegetation under application was obtained from a site visit by DEC staff on 19 March 2008, the application form and supporting documentation (DEC TRIM Ref: DOC48984, DOC37237, DOC39051).
	The vegetation on-site consists of Acacia spp., native grasses, bauhinia, grevillea and various common groundcover (DEC, 2008).		

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 750 (Hopkins et al, 2001). The vegetation on-site is Pindan shrubland consisting of Acacia species over Spinifex grasses (Hopkins et al, 2001). This vegetation type occurs throughout the immediate vicinity of the local area, and the application area has experienced degradation from bushfires and historical clearing. Patches of Buffel grass are found within the application area.

Given the extensive range of similar habitat as that under application, the proposed clearing of 10ha of vegetation is unlikely to have a significant impact on the biodiversity of the area.

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

Methodology

Hopkins et al (2001);
SAC Biodatasets (061107);
GIS Databases:
- Broome 1m Orthomosaic

(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 recorded occurrences of threatened or priority fauna within the local area (5km radius). The habitat under application is well represented in the surrounding area, and given the impacts experienced by recent bushfires and historical clearing, the vegetation is not likely to be significant habitat for fauna.

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

Methodology SAC Bio Datasets (061107)

(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 three recorded occurrences of priority flora known to occur on pindan soils. These are *Glycine pindanica* (P1), *Tephrosia andrewii* (P1) and *Aphyllodium glossocarpum* (P3). A flora survey was performed on the site to determine the presence of any of these priority flora, however none were located (DEC, 2008).

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

Methodology DEC (2008);
SAC Bio Datasets (061107)

(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 recorded occurrences of threatened or priority ecological communities within the local area (5km radius).

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

Methodology SAC Bio Datasets (061107)

(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 750 (Hopkins et al, 2001). Approximately 2.3% of this Association is located within IUCN Class I-IV Reserves and CALM managed reserves (Shepherd et al, 2001). There is 1,228,016 ha of this Association remaining, approximately 99.7% of the Pre European extent (Shepherd et al, 2001), which indicates that it is well represented in the natural environment.

The clearing of 10 ha is not likely to significantly reduce the remaining extent of this vegetation association, therefore is not likely to be at variance to this Principle.

Methodology Hopkins et al (2001);
Shepherd et al (2001);
GIS database:
- Pre-European Vegetation
- Broome 1m Orthomosaic

(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

There is a minor, ephemeral watercourse located 6.6km east of the application area, and a second located 9km south of the application area. Various areas subject to inundation are located 9km to the east, and Roebuck Bay is located 15km south west. Due to these large distances, it is not likely that the clearing will impact on these areas.

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

Methodology GIS Databases:
- RAMSAR, Wetlands
- ANCA, Wetlands
- Hydrography, linear

- Hydrography, linear (hierarchy)

(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 Wanganut Land System. The soils are deep red sandy Cockatoo soils with good drainage and the landscape is considerably flat with slight undulations (Speck et al, 1964). As the area has already experienced impacts from recent bushfires, and given the characteristics of the soils on site, it is not likely that clearing will increase land degradation.

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

Methodology Speck et al (1964);
GIS databases:
- Soils, Statewide
- Topographic Contours, Statewide

(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

Roebuck Bay is located 15km south west of the application area, a Ramsar listed wetland that is also listed on the Register of National Estate. Roebuck Station, subject to the 2015 pastoral lease renewal process, is located 9km south. Due to these large distances, it is not likely that the clearing will impact on these areas.

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

Methodology GIS Database;
- CALM Managed Lands and Waters
- CALM Regional Parks
- Proposed 2015 pastoral lease exclusions
- RAMSAR, Wetlands
- Register of National Estate

(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 Act 1914. The Public Drinking Water Source Area is located 7.6km north west of the application area. There is one minor, ephemeral water course located 6.6km east of the application area, a second located 9km south, various areas subject to inundation located 9km east and Roebuck Bay located 15km south west. Due to these large distances, it is not likely that the clearing will impact on the ground water of the PDWS area, or the surface water of the water courses and bay.

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

Methodology GIS Database;
- Public Drinking Water Source Areas (PDWSAs)

(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 surrounding the proposal area is considerably flat and experiences approximately 700mm annually. The low gradients, a lack of defined drainage channels and heavy seasonal rainfall can cause sheet flooding in the area. The clearing is not likely to increase cause or exacerbate the incidence or intensity of flooding within the area.

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

Methodology GIS Database;
- Topographic Contours, Statewide
- Hydrography, linear

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

Comments

The proposal is to clear 10 hectares for the purpose of installing a centre-pivot irrigation system and planting of

turf (Sir Walter Buffalo). The land is currently under a private horticultural lease, valid until 1 July 2012 with options to extend.

The intention is to use land for a turf farm. Due to the rapid turn-over in grass production of 6-8 weeks, there is a very low risk of the grass setting seed or of escape of the grass into the surrounding environment.

The local area has been subject to three previous referrals to the Environmental Protection Authority. None of these referrals are related to the proposal.

The proponent has obtained planning approval from the Shire of Broome.

A water allocation licence granted under the Rights in Water and Irrigation Act 1914 is held for the property, and the allocation is sufficient for the proposed turf farm.

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

There are no native title claims over the area proposed to be cleared. A submission raised the issue that the granting of this clearing permit may be a future act under the Native Title Act 1993. As the underlying land tenure is Freehold land, and that a horticultural lease has been granted for the proposal, native title has been extinguished. Therefore, the granting of this clearing permit is not a future act.

A submission raised the issue that the clearing may breach the Aboriginal Heritage Act 1972. There are no recorded Aboriginal Sites of Significance present within the area proposed to be cleared, however it is the proponent's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Miscellaneous	Burning	10	The proposed clearing was found not likely to be at variance to all principles.

5. References

- Department of Environment and Conservation (2008) Site Inspection Report. Native Vegetation Conservation CPS 2168/1. DEC TRIM Ref: DOC48984
- 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.
- 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.

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)

