

1. Application details

1.1. Permit application details

Permit application No.: 2599/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Indigenous Land Corporation

1.3. Property details

Property: LOT 382 ON PLAN 193561 (ROEBUCK 6725)
Local Government Area: Shire Of Broome
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
9		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 750: Shrublands, pindan; Acacia tumida shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Hopkins et al, 2001).	The application area is covered with native shrubs and timber species common to the Pindan shrublands vegetation class.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation description was assessed through aerial photography and supporting documentation (DEC TRIM Ref: DOC57247).

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 is covered with native shrubs and timber species common to the Pindan shrublands vegetation class.

Given the extensive range of similar habitat as that under application, the proposed clearing of 9ha 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);
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 (10km radius). The habitat under application is well represented in the surrounding area, and therefore, 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 310708

(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 records of rare flora within the local area (10km radius). The closest record is located 30km west of the application area on red pindan soils within a coastal environment. Given the distance from the application area it is unlikely that the species will be found within the proposed clearing area

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

Methodology SAC Bio Datasets 310708

(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 (10km radius). The closest approximately 30km west of the application area, is found on coastal sand dunes not Pindan shrublands.

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

Methodology SAC Bio Datasets 310708

(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 - Shrublands, pindan; *Acacia tumida* shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (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, 2006). There is 1,228,016 ha of this Association remaining, approximately 99.7% of the Pre European extent (Shepherd et al, 2006), which indicates that it is well represented in the natural environment.

The clearing of 9 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 (2006);
GIS database:
- Pre-European Vegetation - DA 01/01
- 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 approximately 5km east of the application area. Various areas subject to inundation are located 7km to the east, and Roebuck Bay is located approximately 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 - DEC 03
- ANCA, Wetlands - Environment Australia 26/3/99
- Hydrography, linear - DOW 13/7/06
- Hydrography, linear (hierarchy) - DoW 13/7/06

(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). Given the characteristics of the soils, and that the groundwater salinity level is less than 500mg/L TDS (Total Dissolved Solids) 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 DA 11/99
- Groundwater Salinity Statewide DoW 13/07/06
- Topographic Contours, Statewide - DOLA 12/09/02

(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 approximately 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 approximately 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 01/06/05
- Proposed 2015 pastoral lease exclusions 30-10-2001
- RAMSAR, Wetlands DEC 03
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

(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 Cape Leveque Coast Basin Catchment. There is one minor, ephemeral water course located approximately 5km east of the application area, a second located 9km south, various areas subject to inundation located 7km east and Roebuck Bay located approximately 15km south west. Due to these large distances, it is not likely that the clearing will impact on the ground water of the 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;
- RAMSAR, Wetlands - DEC 03
- ANCA, Wetlands - Environment Australia 26/3/99
- Hydrography, linear - DOW 13/7/06
- Hydrography, linear (hierarchy) - DoW 13/7/06

(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 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 for a small area (9ha) and 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 - DOLA and ARMY 12/09/02
- Hydrography, linear - DOW 13/7/06

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

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

The proposed works is listed as Prescribed Premises under the Environmental Protection Regulations 1987. A Works approval from DEC has been obtained (DOC65167).

The proponent has obtained planning approval from the Shire of Broome and has extended its current licence to take ground water with the Department of Water (DOC65167).

- Methodology** GIS Databases:
- Native Title Claims - LA 2/5/07
 - Aboriginal Sites of Significance - 26 April 2007
 - Environmental Impact Assessments - EPA 22/2/07

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance to the remaining clearing Principles.

5. References

- 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.
- Sac Bio Datasets (31/07/08). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- 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)