



1. Application details

1.1. Permit application details

Permit application No.: 2873/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Graeme Edward & Judith Anne Rogers

1.3. Property details

Property: LOT 86 ON PLAN 238433 (Lot No. 86 GREAT NORTHERN PARDOO 6721)

Local Government Area: Shire Of East Pilbara

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Burning	Pastoral Diversification

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
Shrublands, pindan; acacia shrubland with scattered low trees over <i>Tridodia</i> spp.	The area under application has been historically grazed by sheep and suffers other impacts associated with pastoral activities. Aerial photography suggests that only spinifex remains, but no significant trees or shrubs. The area has not been burnt for some time.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation description was advised by applicant and noted from aerial photography.

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

Historically, the vegetation within the proposal area comprised a single, relatively uniform community represented by Beard Vegetation Association 32 (Shepherd, 2007). Typically, this vegetation was Pindan shrubland consisting of acacia species over Spinifex grasses (Shepherd, 2007). The area under application, having been historically grazed by sheep and suffering other impacts associated with pastoral activities, is now only comprised of Spinifex; no trees or shrubs remain (File note).

The area under application is therefore considered to be in degraded (Keighery, 1994) condition as the vegetation under application has been significantly altered by signs of multiple disturbances but retains basic vegetation structure.

Given the extensive range of the remaining vegetation association (close to 100% remaining) within the surrounding area, the proposed clearing of 200ha (two pivot areas each 100ha in size) of the remaining altered vegetation is unlikely to have a significant impact on the biodiversity of the area.

As it is proposed to irrigate cattle fodder (i.e. exotic plant species) a weed management condition is recommended should a permit be granted.

Methodology

Hopkins et al (2001)
Keighery (1994)
Shepherd (2007)
File Note (TRIM Ref DOC 73807).

GIS Database:

- Environmental Impact Assessments
- Clearing Regulations - Environmentally Sensitive Areas

(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 (close to 100% remaining), and given the impacts of previous grazing pressure and pastoral activities, the remaining vegetation under application is not likely to be of significant habitat for fauna.

Methodology GIS Database:
SAC Biodata set accessed 29.12.08 - Fauna

(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 recorded occurrences of declared rare or priority flora within the local area (10km radius).

Methodology GIS dataset:
SAC Biodata set accessed 29.12.08 - DEFL, WAHERB

(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).

Methodology GIS dataset:
SAC Biodata set accessed 29.12.08 - TEC

(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 under application is within Pardoo Station that is approximately 210, 000 ha in size and comprised mostly of undeveloped rangelands and Beard Vegetation Association 32 (Shepherd, 2007; Hopkins et al, 2001).

The majority of the pre-European vegetation extent remains for this vegetation type (greater than 95% remains; Shepherd et al, 2007). The local area (10km radius) appears to be relatively undisturbed (greater than 95% vegetation remains).

The clearing of two 100ha sites is not likely to be at variance to this principle as the area under application is not consider a significant remnant in the extensively cleared local area.

Methodology GIS dataset:
SAC Biodata set accessed 29.12.08
Hopkins et al (2001)
Shepherd (2007)

(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 application area is located between 1-2km south of the southern extent of an ANCA Wetland, within the Eighty Mile Beach System. Pardoo Creek occurs approximately 4-5 km to the west.

As the application area is outside all of the recommended buffer zones for these wetlands (Department of Water, 2006), given the distance to the nearest creek/river course and given that none of the vegetation under application is riparian, it is considered the area under application is not an environment associated with a watercourse or wetland.

Methodology GIS Databases:
- ANCA wetlands
- CALM Managed Lands and Waters
- EPP Lakes Policy Area

- EPP, Wetlands
- Clearing Regulations, Environmentally Sensitive Areas
- Hydrography linear

(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 soil of the area under application is described as Pindan country characterised by gently undulating sand plains with a few small rocky sandstone residuals with the chief soils being red earthy sands with good drainage.

The area has been historically grazed with only Spinifex vegetation remaining (File note).

Rainfall for Pardoo Station (Pardoo is Bureau of Meteorology a recording station) averages 315mm; evaporation exceeds rainfall (Groundwater Consulting Services Pty Ltd, 2008).

Given these characteristics, the proposed clearing is unlikely to cause appreciable land degradation.

Methodology Northcote et al. (1968)
Groundwater Consulting Services Pty Ltd, 2008
File note (TRIM Ref DOC 73807)

(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 application area is located between 1-2km south of the southern extent of an ANCA Wetland, within the Eighty Mile Beach System.

As the application area is outside all of the recommended buffer zones for these wetlands (Department of Water, 2006), it is not likely that the clearing of two 100ha parcels of degraded vegetation will impact on this conservation area.

Methodology Department of Water, 2006
GIS Databases:
- ANCA wetlands
- CALM Managed Lands and Waters
- EPP Lakes Policy Area
- EPP, Wetlands
- Clearing Regulations, Environmentally Sensitive Areas
- Hydrography linear

(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 area under application is within the Canning Kimberley Groundwater sub area, proclaimed under the Rights in Water and Irrigation (RIWI) Act 1914. There are no Public Drinking Water Source Areas within a 10 km radius, the nearest significant drainage line (Pardoo Creek, minor, non-perennial) is approximately 1.5km west and a wetland system 1-2km north of the proposal area. An undefined watercourse/channel occurs either side of the proposed clearing areas. However, these channels do not appear to link into any other nearby watercourse.

The area under application, having been historically grazed by sheep and suffering other impacts associated with pastoral activities, is now only comprised of sparsely distributed Spinifex; no trees or other shrubs remain (File note).

Methodology File note (TRIM Ref DOC 73807)
GIS Database:
- Public Drinking Water Source Areas (PDWSA)
- Hydrography, linear

(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 soil of the area under application is described as Pindan country characterised by gently undulating sand plains with a few small rocky sandstone residuals with the chief soils being red earthy sands with good

drainage. The landscape is considerably flat (ranges from 10-20m AHD) with slight undulations.

Rainfall for Pardoo Station averages 315mm and evaporation exceeds rainfall (Groundwater Consulting Services, 2008).

These factors are unlikely to have any influence on the incidence of flooding.

Methodology Northcote et al. (1968)
Groundwater Consulting Services Pty Ltd (2008), Pardoo Station, Project number PARDOO1.

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

Comments

The proposal is to clear two, 100 hectare plots for the purpose of installing centre-pivot irrigation systems and planting fodder species of either oats, sorghum or Rhodes grass (Groundwater Consulting Services Pty Ltd). The land is currently under a pastoral lease. The pastoral property is not subject to any 2015 Pastoral lease exclusions.

The Pastoral Lands Board has granted a Pastoral Diversification Permit for the proposed pivot irrigation/fodder activity.

The proposed activity requires an increase to Pardoo Station's current water extraction licence; the proponent is still to finalise the licence management and monitoring strategies before the ground water licence itself is issued by the Department of Water.

There is one native title claim over the area under application. The proposal constitutes a future act under the Native Title Act 1993 for which notification has been given. No submission was received. The proponent has entered into an agreement with the claimant independently of this clearing application.

Methodology Groundwater Consulting Services Pty Ltd (2008), Pardoo Station, Project number PARDOO1.

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. The proposed clearing is not likely to be at variance to any of the clearing Principles.

5. References

- Department of Water (2006) Water Quality Protection Note 6: Vegetation Buffers to Sensitive Water
File note (2008), telephone conversatiuon with applicant on 24 December 2008 (TRIM Ref DOC 73807).
Groundwater Consulting Services Pty Ltd (2008), Pardoo Station, Project number PARDOO1 (TRIM Ref DOC 73849).
Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMSscience 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. (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.

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)

