Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1640/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Whelans Town Planning on behalf of BHP Billiton Iron Ore

1.3. Property details

Property: PROPOSED LOT 500 ON DEPOSITED PLAN 55236 (NEWMAN 6753)
Local Government Area: Shire Of East Pilbara
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.3		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 82: Hummock grasslands, low tree steppe; snappy gum over Triodia wiseana (Hopkins et al., 2001).	The proposal includes mechanical clearing of 2.3ha of vegetation that has been disturbed by the construction of a drainage channel through the site. The vegetation under application is described as relatively undisturbed scattered low woodland upon a rocky slope area with Eucalyptus leucopholia subsp. leucopholia trees over scattered Acacia pruinocarpa tall shrubs over Triodia pungens hummock grassland (ENV Australia, 2007). Vegetation in the flood plain area is described as scattered tall Acacia aneura shrubs over a *Cenchrus ciliaris grassland. The flood plain area is in a degraded state with many tracks that extend through the site, rubbish and weeds are present.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed from photographic evidence of the site provided by Whelans Town Planning and site visit by DEC staff; the majority of the flood plain area is severely degraded with tracks cutting through the property. Much of the site is bare with only small grass species and the occasional shrub present. Vegetation on the rocky slope is in good condition with native shrubs and grasses present. ENV Australia undertook a Rare and Priority Flora Search of the site in February 2007 with no Declared Rare Flora or Priority species recorded.

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 proposed clearing of 2.3ha covers a rocky hill slope and floodplain area. Vegetation on the rocky slope consists of relatively undisturbed scattered low woodland Eucalyptus leucopholia subsp. leucopholia trees over scattered Acacia pruinocarpa tall shrubs over a Triodia pungens hummock grassland according to a flora survey that was conducted by ENV in February 2007 (ENV Australia, 2007). Vegetation in the flood plain area is described by ENV as scattered tall Acacia aneura shrubs over a *Cenchrus ciliaris grassland. The flood plain area is in a degraded state with many tracks that extend through the site, rubbish and weeds are present.

The level of disturbance to the site and low native species density suggests that the original biodiversity has

been significantly compromised. The area to be cleared is small and the vegetation associated with the site is highly represented elsewhere in the state. The area under application is not likely to be self-sustaining into the future and does not contain higher level of biodiversity than surrounding areas of the bioregion.

Methodology ENV Australia (2007)
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**
Fauna species or species habitat of conservation significance known to occur in the local area (10 km radius) include: Bilby, Macrotis lagotis (Vunerable (VU)); Pilbara Leaf-nosed Bat, Rhinonicteris aurantius (VU); Pilbara Olive Python, Morelia olivacea barroni (VU); Rainbow Bee-eater, Merops ornatus and the Oriental Plover, Charadrius veredus (DOE 2007). The area proposed to clear has been previously disturbed via construction of a drainage channel through the centre of the site (DPI 2007) which is cleared annually to remove debris build up. Vegetation on the site within the floodplain area remains in very poor condition (ENV 2007, Whelans Town Planning (b) 2007).

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 2.3 hectares of vegetation from the proposed 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 ENV 2007
Department of the Environment and Water Resources (2007) Protected Matters Search Tool, EPBC Act Protected Matters Report. <www.environment.gov.au> DEC TRIM Ref: DOC16352
Wheelans Town Planning (b) 2007

(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**
ENV consultants conducted a flora survey of the site in February 2007 which found that there are no known populations of Declared Rare Flora (DRF) within the clearing permit application area (ENV 2007). The nearest known populations of DRF are six populations of Lepidium catapycnon, which occur to the northwest of the application area. The nearest of these populations is located approximately 7.5 km outside the boundary of the application area, while the other five populations are located approximately between 8km and 10.3km outside the boundary of the application area (GIS Database). The clearing of 2.3ha of vegetation is not likely to impact upon the DRF due to the large distances between the two and degraded nature of the site.

The survey by ENV also discovered no Endangered or Vulnerable species, pursuant to Section 178 of the EPBC Act (1999) and no Priority flora species located on the site (ENV 2007).

The site has been previously cleared and the vegetation that has re-established is considered to be in very poor condition (ENV 2007).

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology ENV 2007 Newman Eco Village Lot 2350 Gun Club Road, Flore Survey

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 at variance to this Principle**
There are no known Threatened Ecological Communities (TEC's) within the areas applied to clear (GIS Database). The nearest known TEC is the Ethel Gorge aquifer stygobiont community which is located approximately 12 km north east of the northern application area (GIS Database). Due to the distance from the application area, these ecosystems are unlikely to be affected by the proposed clearing and therefore this proposal is not at variance to this principle.

Methodology GIS Database: Threatened Ecological Communities - CALM 15/7/03.

(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 comprises components of Beard Vegetation association 82 (Hopkins et al 2001).

There is approximately 2,920,910 hectares of Association 82 remaining, approximately 99.9% of the pre-European extent (Shepherd et al. 2002), which indicates that it is well represented in the natural environment. There is approximately 8.9% of Association 82 located within ICUN Class I-IV Reserves (Shepherd et al. 2002), and 1% is located in pastoral leases managed by CALM (Shepherd et al. 2002).

Clearing of 2.3 hectares of vegetation will not significantly reduce the remaining extent of Vegetation Association 82. Therefore this Vegetation Association is of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment 2002) and the proposal is not likely to be at variance to this principle.

Methodology

Shepherd et al. (2002)
Hopkins et al. (2001)
Department of Natural Resources and Environment (2002)
GIS database:
- Pre-European Vegetation - DA 01/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 may be at variance to this Principle

A perennial creekline runs through the centre of the site in a SSE to NNW direction for approximately 202 metres (GIS database). In association with this creekline, the site was disturbed by alteration of the creekline to form a major drainage channel running the length of the site (DPI 2007). The proposed clearing is for a small area and is unlikely to affect the functioning of this drainage system.

There is also a non-perennial water course extending approximately 65 metres into the site perpendicular to and meeting with the perennial creekline mentioned above. Non-perennial creeklines only flow after heavy rainfall events. The mean annual rainfall is 4oo mm/annum and the evapotranspiration rate is four times this at 1600 mm/annum (GIS Database) and therefore the area is principally dry throughout the year and the chance of water flow in this water course is minimal.

The area under application includes a constructed drainage line and a small portion of the extremity of a non-perennial creek. Therefore the proposal may be at variance to this principle.

Methodology

DPI 2007 Advice on Previous Disturbance to Site TRIM REF File:DEC2101 Doc: DOC16894
GIS Database:
~ Hydrology, linear - DOE 1/02/04;
~ Lakes 250K - GA;
~ Rivers 250K - GA;

(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 application area lies within the Newman, and Elimunna Land Systems. Both systems are inherently resistant to erosion (Dept. Agriculture 2004). Provided appropriate erosion control measures are implemented, the proposed clearing is unlikely to cause appreciable land degradation. Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology

Department of Agriculture Technical Bulletin 2004.
GIS Database:
~ RANGELAND LAND MAPPING SYSTEM - DA

(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 at variance to this Principle

There are no conservation areas in the vicinity of the application area. The nearest DEC managed lands are the

Collier National Park, approximately 122km south/southwest of the application area; and the Karijini National Park, approximately 119km west/northwest of the application area (GIS Database). This proposal is unlikely to have any impact on any conservation area, based on the large distance to the nearest conservation reserve. Therefore, the proposed clearing is not at variance to this principle.

Methodology GIS Database: CALM Managed Land and Waters - 1/06/04;

(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 application area is located within the Newman Water Reserve, a Public Drinking Water Source Area (PDWSA) (GIS Database). The Department of Water advise no objections to the proposed clearing as the land under application is to be approved for residential use.

A perennial creekline runs through the centre of the site in a SSE to NNW direction for approximately 202 metres (GIS database). In association with this creekline, the site was disturbed with the construction of a major drainage channel running the length of the site (DPI 2007).

There is also a non-perennial water course extending approximately 65 metres into the site perpendicular to and meeting with the perennial creekline mentioned above. Non-perennial creeklines only flow after heavy rainfall events. The mean annual rainfall is 4oo mm/annum and the evapotranspiration rate is four times this at 1600 mm/annum (GIS Database) and therefore the area is principally dry throughout the year and the chance of water flow in this water course is minimal.

The proposed clearing is for a relatively small area (2.3 ha) and is unlikely to cause deterioration in the quality of any surface or underground water. Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology

DoW (2007) Advice on CPS1619 and 1640 TRIM Ref: DOC17789
DPI 2007 Advice on Previous Disturbance to Site ý TRIM REF File:DEC2101 Doc: DOC16894
GIS Database:
~ Public Drinking Water source Areas (PDWSA's) -DOE 29/11/04;
~ Hydrography, linear (hierachy) - DOE 13/4/05.
~ Rainfall, Mean Annual - BOM 30/09/01

(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

The area proposed to be cleared is relatively small (2.3 ha) and flat and is not associated with a permanent waterbody (GIS Database). The area consists of a low rocky hill leading down to a flood plain (ENV 2007). The flood plain has been previously disturbed with the construction of a major drainage channel running the length of the land in association with an existing creekline (DLI 2007). The flood plain is degraded due to the existence of several tracks, weed invasion and rubbish (ENV 2007). The area potential evapotranspiration of 1600 mm/annum is four times the mean annual rainfall of 400mm (GIS database). The proposed clearingis for a small area and is not likely to cause or exacerbate the incidence or intensity of flooding. Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS database:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

A lease agreement is still under negotioation for the land under application.

The area to be cleared is currently zoned for rural land use (GIS database). Rezoning of the vacant crown land adjacent to Nicholls Road, Newman from Rural land use to Special - single person accommodation is currently awaiting EPA approval. Town Planning Scheme 4 Amendment 6 (CRN220849) for the rezoning of this land for special use - single persons accommodation has been forwarded to the EPA for possible assessment (TRIM REF DEC2238).

No advice was received in response to a Direct Interest Invite Letter sent to the Shire of East Pilbara.

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

There is one Native Title Claim relating to the area under application. The claim has been registered with the National Native Title Tribunal (WC99-004) and the status has been finalised. A direct Interest Invite was sent to

Yamatji Marpla Land and Sea Council for the proposal but no response was received.

Methodology TRIM File Ref DEC2238

GIS Themes:

~ Register of Heritage Places - DPI 14/7/03;

~ Register of National Estate - EA 28/01/03;

~ Aboriginal Sites of Significance - DIA 28/02/03;

~ Native Title Claims - DLI 7/11/05

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	2.3	Assessable criteria have been addressed and no objections were raised. The application was not at variance to principles (d) and (h) and not likely to be at variance to principles (a), (b), (c), (e), (g), (i) and (j). Due to the existence of a watercourse within the application area, the proposal may be at variance to principle (f). Grant Undertaking until Lease has been 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.

Department of the Environment and Water Resources (2007) Protected Matters Search Tool, EPBC Act Protected Matters Report. <www.environment.gov.au> DEC TRIM Ref: DOC17135

Department of Water (2007) Advice for CPS1619 and CPS1640. TRIM Ref: DOC17789

DPI 2007 Advice on Previous Disturbance to Site DEC TRIM REF File:DEC2101 Doc: DOC16894

ENV Australia (2007) Newman Eco Village Lot 2350 Gun Club Road: Flora Survey. DEC TRIM Ref DOC16826

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2002) Native Vegetation in Western Australia, Extent, Type and Status

Van Vreeswyk, A.M.E, Payne, A.L. , Leighton K.A. and Hennig, P. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Technical Bulletin No. 92, Department of Agriculture Government of Western Australia.

Wheelans Town Planning (a) (2007) Aerial Photograph of Site Proposed to Clear, DEC TRIM Ref DOC8857

Wheelans Town Planning (b) (2007) Photographs of Site and Vegetation on site, DEC TRIM Ref DOC16041

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)