

Clearing Permit Decision Report

I. Application details

1. Application deta	ils
1.1. Permit applica Permit application No.: Permit type:	tion details 4830/2 Purpose Permit
1.2. Proponent det Proponent's name:	ails Robe River Limited
1.3. Property detai Property: Local Government Area: Colloquial name:	Is Iron Ore (Robe River) Agreement Act 1964, Mineral Lease 248 SA (AML 70/248) Shire of Ashburton West Angelas Deposit F Project
1.4. Application Clearing Area (ha) 35.5	No. TreesMethod of Clearing Mechanical RemovalFor the purpose of: Mineral exploration, hydrogeological drilling and access tracks
1.5. Decision on ap Decision on Permit Applie Decision Date:	
2. Site Information	
-	onment and information
•	the native vegetation under application
Vegetation Description	Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area:
	18: Low woodland; mulga (Acacia aneura) (GIS Database).
	Biota Environmental Sciences (2006) conducted a flora survey of the application area and surrounding areas from 5 to 11 May 2004 and described five broad vegetation types within the application area;
	• Hard Spinifex <i>Triodia wiseana</i> and Soft Spinifex <i>Triodia pungens</i> or <i>Triodia</i> sp. Mt. Ella hummock grasslands with a scattered to moderately dense shrub overstorey dominated by varying proportions of <i>Acacia maitlandii</i> , <i>A. bivenosa</i> and <i>A. hamersleyensis</i> on stony hills in the northern section of the study area;
	Low woodlands to tall shrublands of Acacia catenulate in gorges;
	Hummock grasslands of <i>Triodia</i> aff. <i>basedowii</i> , with <i>some T. pungens</i> , on stony baseslopes;
	 Woodlands to tall shrublands of various forms of Mulga Acacia aneura over open hummock grasslands, usually of Triodia pungens, on clayey soils of the broad valleys in the southern section of the study area;
	Cracklings supporting tell shruhlands dominated by various combinations of Associa maitlandii

 Creeklines supporting tall shrublands dominated by various combinations of Acacia maitlandii, Gossypium robinsonii, Petalostylis labicheoides and Rulingia luteiflora over open hummock grassland of Triodia pungens (Biota Environmental Sciences, 2006).

Clearing Description West Angelas Deposit F Project.

Robe River Limited (Robe River) proposes to clear up to 35.5 hectares of native vegetation within a total boundary of 700 hectares for the purpose of mineral exploration, hydrogeological drilling and access tracks. The project is located approximately 90 kilometres west of the Newman town site, in the Shire of Ashburton.

 Vegetation Condition
 Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery,1994);

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment Clearing permit CPS 4830/1 was granted by the Department of Mines and Petroleum on 23 February 2012. The clearing permit authorised the clearing of 15.5 hectares of native vegetation within a total boundary of 700 hectares.

3. Assessment of application against clearing principles

Comments

On 22 May 2014, Robe River Limited applied to increase the area to be cleared from 15.5 hectares to 35.5 hectares, and add hydrogeological drilling to the purpose for which clearing may be done.

Biota (2006) and Pilbara Iron (2006) conducted a flora and vegetation assessment in 2004 and 2006 and identified five Priority flora. No further flora or fauna surveys have been conducted over the application area following the grant of the original permit. According to Naturemap,13 Priority flora have been recorded within 5 kilometres of the application area (DEC, 2014). Of these, only *Josephinia* sp. Marandoo (M.E. Trudgen 1554) (Priority 1), has been found within the application area. Only one record for this species occurs within the application boundary. The proposed increase in clearing is not likely to impact the conservation of this species.

A search of the Naturemap database (DEC, 2014) returned records for 61 avian, 25 mammal, 72 reptile, one amphibian and 12 invertebrate species within a 10 kilometre buffer of the application area. Of these, six conservation significant fauna have the potential to occur within the application area, including:

- Fork-tailed Swift (Apus pacificus; Migratory);
- Australian Bustard (*Ardeotis australis*; Priority 4);
- Bush Stone-curlew (Burhinus grallarius; Priority 4);
- Ghost Bat (Macroderma gigas; Priority 4);
- Western Pebble-mound Mouse (*Pseudomys chapmani*; Priority 4); and
- Pilbara Barking Gecko (Underwoodisaurus seorsus; Priority 1) (DEC, 2014).

Biota (2006) advise that the proposed clearing is unlikely to have a significant impact on the Western Pebblemound Mouse or Australian Bustard, given that the habitat within the application area is common and widespread within the region. Similarly, the proposed clearing is not likely to have a significant impact on the Fork-tailed Swift, which is highly mobile and only likely to occur as a vagrant, or the Ghost Bat, due to the absence of cave habitat (Biota, 2006).

Previously grouped with the species *Underwoodisaurus milii*, the Pilbara Barking Gecko was recently described in 2011 (Doughty and Oliver, 2011) and is known from rocky areas including gorge/gully habitat, and within vegetation types of low sparse trees of *Eucalyptus leucophloia*, low shrubs of *Acacia pilbara* and *Triodia wiseana* (Doughty and Oliver, 2011). Three habitat types within the application area may match this description, including:

- lower stony footslopes at the interface between Acacia dominated and eucalypt dominated communities;
- stony hilltops and upper slopes dominated by eucalypts over Triodia; and
- incised gullies and creeks (Biota, 2005).

Given the West Angelas area is within the known range of the Pilbara Barking Gecko, and the availability of suitable habitat, this species has the potential to occur within the application area. However, Biota (2005) did not record *Underwoodisaurus milii* during a fauna survey of the application area, and the clearing of 35.5 hectares within a boundary of 700 hectares is unlikely to have an impact on the conservation status of this species. No further Threatened or Priority fauna are considered to potentially occur within the application area.

Based on the above, the proposed clearing is not likely to be at variance to Principles (a), (b) or (c).

The increase in the amount of proposed clearing is not likely to increase the incidence or intensity of flooding within or around the application area. While impacts to riparian vegetation along ephemeral drainage lines may be increased, the area has been historically disturbed by exploration activities and the proposed clearing is unlikely to result in a significant level of degradation to riparian species or communities.

Based on the above, the proposed clearing is at variance to Principle (f) and not likely to be at variance to Principle (j).

Current environmental information has been reviewed and the assessment of clearing principles (d), (e), (g), (h) and (i) is consistent with the assessment in clearing permit decision report CPS 4830/1.

Methodology	Biota (2005)
	Biota (2006)
	DEC (2014)
	Doughty and Oliver (2011)

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

Comments

There are two Native Title claims over the area under application (WC05/3 and WC10/11). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are 12 registered Aboriginal Sites of Significance within the application area (GIS Database). 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.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 2 June 2014 and 16 June 2014 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. There were no submissions received.

Methodology GIS Database:

- Aboriginal Sites of Significance

- Native Title Claims - Determined by the Federal Court

4. References

Biota (2005) Fauna Habitats and Fauna Assemblage of Deposits E and F at West Angelas. Consultant report prepared for Robe River Iron Associates, June 2005.

Biota (2006) Vegetation and Flora Survey of West Angelas Deposits E and F. Consultant report prepared for Robe River Iron Associates, March 2006.

DEC (2014) NatureMap: Mapping Western Australia's Biodiversity, Department of Environment and Conservation, http://naturemap.dec.wa.gov.au/default.aspx, viewed June 2014.

Doughty, P and Oliver, P. M (2011) A new species of *Underwoodisaurus* (Squamata: Gekkota: Carphodactylidae) from the Pilbara region of Western Australia. *Zootaxa* 3010: 20–30.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

5. Glossary

Acronyms:

ВоМ	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DolR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World
	Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). Declared rare and priority flora list for Western Australia, 22 February 2005. Department of Conservation and Land Management, Como, Western Australia} :-

- P1 Priority One Poorly Known taxa: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2 Priority Two Poorly Known taxa: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3 Priority Three Poorly Known taxa: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4 Priority Four Rare taxa: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- **R Declared Rare Flora Extant taxa** (= *Threatened Flora = Endangered + Vulnerable*): taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X Declared Rare Flora Presumed Extinct taxa: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1 Fauna that is rare or likely to become extinct: being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2 Fauna that is presumed to be extinct: being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3 Schedule 3 Birds protected under an international agreement: being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4 Other specially protected fauna: being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia} :-

- P1 Priority One: Taxa with few, poorly known populations on threatened lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2 Priority Two: Taxa with few, poorly known populations on conservation lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3 Priority Three: Taxa with several, poorly known populations, some on conservation lands: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4 Priority Four: Taxa in need of monitoring: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- **P5 Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (Environment Protection and Biodiversity Conservation Act 1999)

- **EX Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- **EX(W)** Extinct in the wild: A native species which:
 - (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
 - (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR Critically Endangered: A native species which is facing an extremely high risk of extinction in the wild in

the immediate future, as determined in accordance with the prescribed criteria.

- Endangered: A native species which:
 - (a) is not critically endangered; and
 - (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU Vulnerable: A native species which:
 - (a) is not critically endangered or endangered; and
 - (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD Conservation Dependent: A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

Principles for clearing native vegetation:

EN

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

(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.

- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.