

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6570/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Areas Limited

1.3. Property details

Property: Mineral Lease 77/399
Local Government Area: Shire of Kondinin
Colloquial name: Cosmic Boy Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:
5 Mechanical Removal Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 25 June 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation association is located within the application area (GIS Database):

Beard vegetation association 511: Medium woodland; salmon gum & morel:

Beard vegetation association 1413: Shrublands; acacia, casuarina & melaleuca thicket

Botanica Consulting (2015) conducted a flora and vegetation survey over the application area and surrounding area. The survey identified three vegetation types within the application area:

- Open tree mallee of Eucalyptus pileata/E. Tetroclada over heath of Allocasuarina campestris/A. Corniculata/Melaleuca hamata and open low sedge of Lepidosperma sanguinolentum on ironstone hillslope;
- Open tree mallee of Eucalyptus calycogona/E. eremophila/E. urna over low scrub of Daviesia benthamii/Melaleuca pauperiflora and dwarf scrub of Acacia merrallii/Dodonaea bursarifolia/Westringia cephalantha on sand-loam plain; and
- Forest of Eucalyptus salmonophloia/ E. salubris/ E. urna over thicket of Melaleuca lateriflora/ M. pauperiflora over dwarf scrub of Acacia intricata/ A. merrallii.

In addition to the above vegetation types, areas of rehabilitated vegetation were mapped within the application area.

Clearing Description

Cosmic Boy Project. Western Areas Limited proposes to clear up to 5 hectares of native vegetation within a total boundary of approximately 34.8 hectares, for the purpose of mineral exploration. The project is located approximately 80 kilometres east of Hyden in the Shire of Kondinin.

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Τо

Completely
Degraded: No
longer intact;
completely/almost
completely without
native species
(Keighery, 1994).

Comment

Vegetation condition was derived from a flora and vegetation survey conducted by Botanica Consulting (2015).

3. Assessment of application against clearing principles

Comments

The application area within falls within the Southern Cross (COO2) subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Southern Cross subregion is characterised by subdued relief, comprised of gently undulating uplands dissected by broad valleys with bands of low greenstone hills (CALM, 2002). The drainage of the Southern Cross subregion is occluded (CALM, 2002).

The application area occurs within the "Middle Iron Cap Hill" expanse which is a Schedule 1 Area (GIS Database). The proposed clearing of up to 5 hectares of native vegetation is for the purpose of mine infrastructure development. Within the clearing permit boundary of approximately 34.8 hectares, significant disturbance is evident from previous development. Existing infrastructure includes a nickel concentrator plant, Run-of-Mine (ROM) and associated tailings pipelines, raw water pond, exploration coreyard, boxcut and portal to Cosmic Boy underground mine, powerline corridor and laydown yards. Given the amount of existing disturbance, the remaining vegetation within the application area is unlikely to provide significant habitat for local fauna species.

The two Beard vegetation associations mapped over the area under application (Beard vegetation associations 511 and 1413) are well represented, with both retaining over 98 % of pre-European levels of vegetation within the state and bioregion (Commonwealth of Australia, 2001; Government of Western Australia, 2013).

There are two species of Threatened flora known within 10 kilometres of the application area, the closest of which (*Boronia revoluta*) was recorded 600 metres north west and is an historic record. A level 1 flora and vegetation survey was conducted over the application area by Botanica Consulting on 7 and 8 March 2015. No Threatened Flora species were recorded within the application area and surrounding area (Botanica Consulting, 2015). Six Priority flora species have been recorded within the local area and one historic record of the Priority 4 listed species *Calamphoreus inflatus* is located within the application area (GIS Database; DPaW, 2014). During the flora and vegetation survey no Priority flora species were recorded (Botanica Consulting, 2015).

No introduced plant taxa (weeds) were identified within the application area (Botanica, 2015). The proposed clearing activities have the potential to result in the introduction or spread of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No threatened ecological communities are known within the application area; however the application lies within the boundary of a Priority 3, Priority Ecological Community (PEC) "Ironcap Hills vegetation complexes." Given that the PEC has known extent of approximately 25,184 hectares (GIS Database), the proposed clearing of up to 5 hectares of native vegetation, in an area that has experienced substantial disturbance, is unlikely to result in any significant impacts to this community.

There are no major or minor watercourses mapped as occurring within the application area (GIS Database) and given the location and relatively small scale of the proposed clearing, land degradation issues are unlikely to arise as a result.

The application to clear 5 hectares of native vegetation for the purpose of a mineral production in an already highly disturbed setting is unlikely to have any significant environmental impacts. Furthermore, the proponent has committed to environmental management measures (Western Areas, 2015).

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*, and the proposed clearing is not likely to be at variance to Principles (a), (b) (c), (d), (f), (g), (h), (i), and (j) and is not at variance to Principle (e).

Methodology

Botanica Consulting (2015)

CALM (2002)

Commonwealth of Australia (2001)

DPaW (2014)

Government of Western Australia (2013)

Keighery (1994)

Western Areas (2015)

GIS Database:

- DEC Tenure
- Imagery
- Groundwater Salinity
- Hydrographic Catchments Catchments
- Hydrography, linear
- IBRA WA (Regions Sub Regions)
- Pre-European Vegetation

- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- Soils, statewide
- Threatened and Priority Flora List
- Threatened Ecological Sites Buffered
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

Comments

There are two Native Title Claims (WC2003/006 and WC2000/007) over the area under application (GIS Database). These claims have been filed at the Federal Court of Australia and registered with the National Native Title Tribunal on behalf of the claimant group respecively. 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 no registered Sites of Aboriginal Significance located in the area applied to clear (GIS Database; DAA, 2014). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal 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 18 May 2015 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. No submissions were received.

Methodology

DAA (2015)

GIS Database:

- Aboriginal Sites of Significance

4. References

Botanica Consulting (2015) Cosmic Boy Level 1 Flora and Vegetation Survey Unpublished report prepared for Western Areas NL, March 2015.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.

Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, http://maps.dia.wa.gov.au/AHIS2/>.

DPaW (2014) NatureMap Department of Parks and Wildlife http://naturemap.dec.wa.gov.au.

Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.

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

Western Areas (2015) Supporting Document for Clearing Permit Application CPS 6570/1 - Mining Tenement M77/399. Unpublished Report Prepared by Western Areas Limited.

5. Glossary

Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment of Agriculture and Food, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DPaW and DER)

DER Department of Environment Regulation, Western Australia
DMP Department of Mines and Petroleum, Western Australia

DRF Declared Rare Flora

DotE Department of the Environment, Australian Government

DoW Department of Water, Western Australia

DPaW Department of Parks and Wildlife, Western Australia

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DotE)

EPA Environmental Protection Authority, Western Australia
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

PEC Priority Ecological Community, Western Australia

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:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T Threatened species:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:

CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.

EN: Endangered - considered to be facing a very high risk of extinction in the wild.

VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

X Presumed Extinct species:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

IA Migratory birds protected under an international agreement:

Specially protected under the Wildlife Conservation Act 1950, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.

Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

S Other specially protected fauna:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P1 Priority One - Poorly-known species:

Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

P2 Priority Two - Poorly-known species:

Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

P3 Priority Three - Poorly-known species:

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5 Priority Five - Conservation Dependent species:

Species that are not threatened but are subject to a specific conservation program, the cessation of

which would result in the species becoming threatened within five years.

Principles for clearing native vegetation:

- (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.