

# **Clearing Permit Decision Report**

### 1. Application details

1.1. Permit application details

Permit application No.: 2161/7
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: Iron Ore (McCameys Monster) Agreement Act 1972, Mining Lease 266SA (AM 70/266)

Local Government Area: Shire of East Pilbara
Colloquial name: South Jimblebar Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

Mechanical Removal Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 28 February 2019

### 2. Site Information

### 2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

### **Vegetation Description**

The area applied to clear has been broadly mapped as:

Beard Vegetation Association 29: Sparse low woodland; Mulga, discontinuous in scattered groups; Beard Vegetation Association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana;* and Beard Vegetation Association 216: Low woodland; Mulga (with spinifex) on rises (GIS Database).

Ecologia Environment Pty Ltd (2006) undertook a baseline biological survey of the western portion of the proposed clearing area between 22 and 28 May 2006. The following four vegetation types were identified from the area:

- 1. Acacia aneura / Acacia pruinocarpa / Corymbia ferriticola sometimes with Eucalyptus leucophloia open scrub to open low woodland B over Eremophila fraseri / E. forrestii / Senna artemisioides subsp. oligophylla x helmsii over mixed open herbs and hummock grass;
- 2. Acacia colei var. colei open scrub to open low woodland, over Acacia melleodora open shrubs, over Aristida sp. / Enneapogon sp. open low grassland;
- Scattered Corymbia hamersleyana / Corymbia ferriticola, over Acacia melleodora open low shrubs, over Triodia basedowii / Triodia wiseana moderately dense hummock grass; and
- 4. Scattered medium shrubs of *G. wickhami / A. pachyacra / Hakea lorea* sometimes with *Eucalyptus gamophylla*, over open to moderately dense *A. ancistrocarpa* sometimes with *Acacia hilliana*, over *Triodia spp*.

Ecologia Environment Pty Ltd (2007) conducted a dual season biological survey over the eastern portion of the proposed clearing area between 24 August and 1 September 2005 and 15 and 21 February 2006. The following seven vegetation types were mapped from the area at a scale of 1:25,000:

- 1. Corymbia hamersleyana open low woodland over Acacia aneura open low woodland over Gossypium robinsonii / Grevillea wickhamii open scrub over Acacia sp. / Eremophila fraseri / Eremophila forrestii open low scrub over Ptilotus obovatus / Solanum lasiophyllum open dwarf scrub over \*Cenchrus ciliaris open low grass;
- 2. Grevillea wickhamii open low scrub over Sida arenicola / Ptilotus calostachyus open dwarf scrub over Acacia hilliana / Acacia adoxa / Goodenia stobbsiana / Halgania solanacea / Scaevola parvifolia open dwarf scrub over Triodia basedowii open hummock grass;
- 3. Acacia aneura / Acacia pruinocarpa open low woodland over Acacia maitlandii open low scrub over Ptilotus

rotundifolius / Senna glutinosa open dwarf scrub over Acacia hilliana / Halgania solanacea / Gompholobium polyzygum open low scrub over Triodia basedowii mid-dense hummock grass;

- 4. Eucalyptus victrix woodland over open low woodland over open scrub over \*Cenchrus ciliaris dense low grass;
- 5. Acacia aneura open scrub over Eremophila compacta open dwarf scrub over Triodia basedowii open hummock grass;
- 6. Corymbia hamersleyana open low woodland over Petalostylis labicheoides open low scrub over Triodia basedowii open hummock grass over \*Cenchrus ciliaris open low grass;
- 7. Acacia aneura / Acacia rhodophloia low woodland over Eremophila latrobei / Eremophila exilifolia / Dodonaea petiolaris / Sida calyxhymenia low scrub over Triodia basedowii hummock grass.
- \* = introduced flora species

#### **Clearing Description**

South Jimblebar Project.

BHP Billiton Iron Ore Pty Ltd proposes to clear up to 755 hectares of native vegetation within a boundary of approximately 6,756 hectares, for the purpose of mineral exploration. The project is located approximately 27.5 kilometres east of Newman, within the Shire of East Pilbara.

#### **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

A majority of the proposed clearing area is within the Sylvania Pastoral lease (GIS Database). Consequently, Buffel Grass (*Cenchrus ciliaris*) was a dominant component of the understorey vegetation in some areas (particularly fringing the Jimblebar Creek and the bordering floodplain) (Ecologia Environment Pty Ltd, 2007).

Overgrazing by cattle was noted at several survey sites throughout the proposed clearing area, whilst some areas were observed to be in a post-fire regrowth stage (Ecologia Environment Pty Ltd, 2007).

Clearing Permit CPS 2161/1 was granted on 14 February 2008. This permit contained two clerical errors that were corrected by the grant of Clearing Permit CPS 2161/2 on 20 March 2008.

BHP Billiton contacted the Department of Mines and Petroleum (DMP) (now Department of Mines, Industry Regulation and Safety) on 2 February 2009 to point out a discrepancy with Clearing Permit CPS 2161/2 that had been uncovered during mineral exploration activity within the area approved to clear under the permit. Permit Condition 7 set out coordinates for Priority Flora locations to be avoided during vegetation clearing, and these were marked green on the Permit Plan 2161/2. BHP Billiton noted that one of the coordinates listed under Condition 7 was not consistent with areas marked green on Plan 2161/2. DMP conducted a review of the discrepancy and found that an inadvertent error was made. The error was corrected by deleting the coordinates listed under Condition 7 (i), and including the following coordinates in their place: Zone 51 199099E 7410100N. No additional assessment of the ten Clearing Principles was required to correct the inadvertent error made on Clearing Permit CPS 2161/2.

On 30 July 2009 BHP Billiton applied to increase the purpose permit boundary of Clearing Permit CPS 2161/3 by 813 hectares. BHP Billiton did not apply to increase the total number of hectares to be cleared under this amendment. On 7 December 2010 BHP Billiton applied to amend the area subject to Condition 3. Condition 3 does not authorise clearing within the area shaded red, which represents the Jimblebar Creek and associated riparian vegetation. BHP Billiton applied to remove an approximate 300 metre stretch of the conditioned area to change the location of the creek crossing.

On 7 September 2012 BHP Billiton applied to amend CPS 2161/5 to reduce the clearing permit boundary from approximately 6,753 hectares to 1,461 hectares. BHP Billiton also applied to amend the annual reporting date to 1 October and extend the duration of the permit by five years. Given the areas requested to be removed from the permit still had outstanding rehabilitation requirements, the permit boundary was not amended.

BHP Billiton has applied to amend CPS 2161/6 to extend the duration of the permit by 7 years, amend the wording of Condition 10 and remove Condition 11.

## 3. Assessment of application against Clearing Principles

### Comments

BHP Billiton has applied to extend the duration of the permit to 30 November 2030, amend the wording of Condition 10 relating to Priority flora and remove Condition 11 relating to protection of other significant flora.

Condition 10 of the permit requires that Priority flora at the locations listed on the permit are avoided by 50 metres. These avoidance areas are also represented as green shaded areas on the attached plan. BHP Billiton has requested that the avoidance area is reduced to 10 metres and the green areas are removed from the plan as they are not required as they are a duplication of the areas listed on the permit. The removal of the areas shaded green on the plan will not have any environmental impact. The assessment of the original permit noted that *Goodenia hartiana* had not been previously recorded in the Pilbara bioregion. *Goodenia nuda* was a Priority 3 species at the time of the original permit assessment and has since been revised to Priority 4. The reduction in the clearing buffer to these species is not likely to have a significant impact on habitat for these species.

Condition 11 requires prior written approval to clear within 50 metres of the listed location of the flora species *Wurmbea deserticola*. A 2006 flora survey recorded the presence of *Wurmbea deserticola* at one location within the permit area (Ecologia Environment, 2006). At the time of the survey this species had not been previously recorded within the Pilbara bioregion and was therefore considered to be potentially locally and regionally significant in terms of biodiversity value. Due to this significance, Condition 11 was placed on the permit. BHP Billiton has requested that this condition is removed from the permit as this species is no longer considered a significant species in the local area. *Wurmbea deserticola* was recorded during a flora survey adjacent to the permit area in 2014 (Syrinx, 2014). The survey also noted that other surveys in the area have confirmed that flora that had previously not been widely collected are more common than originally described (Syrinx, 2014). Given that additional records have been recorded in the local area, the original record within the permit area is not as significant as outlined in the assessment of the previous versions of the permit. The proposed removal of Condition 11 is not likely to have a significant impact on the biodiversity in the permit area.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principle (f), may be at variance to Principle (g), is not likely to be at variance to Principles (a), (b), (c), (d), (h), (i) and (j) and is not at variance to Principle (e).

#### Methodology

Ecologia Environment (2006)

Syrinx (2014)

Western Australian Herbarium (2019)

#### GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

### Planning Instrument, Native Title, previous EPA decision or other matter.

#### Comments

There is one Native Title claim over the area under application (DPLH, 2019). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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 numerous registered Aboriginal Sites of Significance within the application area (DPLH, 2019). 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 Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, 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 amendment application was advertised on 24 September 2018 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2019)

### 4. References

DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.

http://maps.daa.wa.gov.au/AHIS/ (Accessed 15 February 2019).

Ecologia Australia (2006) Jimblebar Marra Mamba Exploration Biological Survey. Report prepared for BHP Billiton Iron Ore Pty Ltd by Ecologia Australia Pty Ltd.

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

Syrinx (2014) South West Jimblebar Level 2 Flora and Vegetation Survey. Report prepared for BHP Billiton Iron Ore by Syrinx Environmental Pty Ltd, February 2014.

Western Australian Herbarium (2019) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ (Accessed 15 February 2019).

### 5. Glossary

### Acronyms:

**BoM** Bureau of Meteorology, Australian Government

DAA
 Department of Aboriginal Affairs, Western Australia (now DPLH)
 DAFWA
 Department of Agriculture and Food, Western Australia (now DPIRD)
 DBCA
 Department of Biodiversity Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DEE Department of the Environment and Energy, Australian Government
DER Department of Environment Regulation, Western Australia (now DWER)
DMIRS Department of Mines, Industry Regulation and Safety, Western Australia
DMP Department of Mines and Petroleum, Western Australia (now DMIRS)

**DPIRD** Department of Primary Industries and Regional Development, Western Australia

**DPLH** Department of Planning, Lands and Heritage, Western Australia

**DRF** Declared Rare Flora

**DoE** Department of the Environment, Australian Government (now DEE)

**DoW** Department of Water, Western Australia (now DWER)

**DPaW** Department of Parks and Wildlife, Western Australia (now DBCA)

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

**DWER** Department of Water and Environmental Regulation, Western Australia

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

TEC Threatened Ecological Community

#### **Definitions:**

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

### T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

#### CR Critically endangered species

Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

### EN Endangered species

Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for endangered fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for endangered flora.

### VU Vulnerable species

Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for vulnerable flora.

### **Extinct Species:**

### EX Extinct species

Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for extinct fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for extinct flora.

### EW Extinct in the wild species

Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

## **Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

#### MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

### CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018.

### OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

### P Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

# P1 Priority One - Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

### P2 Priority Two - Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

### P3 Priority Three - Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

### 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 are close to qualifying for vulnerable but are not listed as Conservation Dependent.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

### **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, rai
	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.
<del>)</del> )	Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area the has been extensively cleared.
7)	Native vegetation should not be cleared if it is growing in, or in association with, an environment associate with a watercourse or wetland.
g)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable lar degradation.
1)	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.
)	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.