Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6048/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Hamersley Iron Pty Ltd**

1.3. Property details

Property: *Iron Ore (Hamersley Range) Agreement Act 1963*
Mineral Lease 4SA (AML 70/4)

Local Government Area Shire of Ashburton
Colloquial name: Brockman 2 Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
35.5		Mechanical Removal	Mineral Exploration and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 31 March 2016

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. One Beard vegetation association is located within the application area (CPS 6048/2) which is inclusive of the original permit area (CPS 6048/1):

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*

A flora and vegetation survey of the application area (CPS 6048/2) identified the following vegetation communities (Rio Tinto, 2015):

S1 *Eucalyptus leucophloia* subsp. *leucophloia* (*Corymbia deserticola* subsp. *deserticola*) scattered low trees to low open woodland over *Grevillea wickhamii*, *Acacia bivenosa* scattered shrubs over *Acacia marramamba* low open shrubland over *Triodia wiseana* hummock grassland;

P1 *Corymbia deserticola* subsp. *deserticola* scattered low trees over *Acacia atkinsiana*, *Acacia exilis* tall open shrubland over *Triodia wiseana* hummock grassland;

P2 *Corymbia deserticola* subsp. *deserticola* scattered low trees over *Acacia atkinsiana* tall open shrubland over *Triodia epactia*, *Triodia wiseana* hummock grassland;

D1 *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia hamersleyana* low open woodland over *Acacia pyrifolia*, *Acacia inaequilatera*, *Acacia maitlandii* tall open shrubland over *Triodia epactia*, *Triodia wiseana* hummock grassland; and

G1 *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia ferriticola* low open woodland over *Acacia pruinocarpa*, *Acacia pyrifolia*, *Hakea chordophylla* tall open shrubland over *Triodia epactia* hummock grassland and *Themeda triandra* open tussock grassland

Clearing Description

Brockman 2 Exploration Project.
Hamersley Iron Pty Ltd proposes to clear up to 35.5 hectares of native vegetation within a total boundary of approximately 179 hectares, for the purpose of mineral exploration and associated activities. The project is located approximately 57.5 kilometres northwest of Tom Price, in the Shire of Ashburton.

Vegetation Condition

Pristine: No obvious signs of disturbance (Kieghery, 1994).

to

Excellent: Vegetation structure intact, disturbance affecting individual species, weeds non-aggressive (Kieghery, 1994).

Comment

Vegetation condition was derived from flora and vegetation surveys conducted by Biota (2010a) and Rio Tinto (2015). Vegetation condition within the application area was addressed using a scale created by Trudgen (1998). The condition ratings for the vegetation in the application area have been converted to equivalent ratings contained in the scale implemented by Kieghery (1994).

The proposed amendment is to allow for an expansion of the drilling program for the Brockman 2 Exploration Project.

Clearing permit CPS 6048/1 was granted by the Department of Mines and Petroleum on 28 August 2014, authorising the clearing of up to 7.5 hectares within a boundary of approximately 18 hectares.

On 27 January 2016, the permit holder applied to amend CPS 6048/1 for the purpose of increasing the area to be cleared by 28 hectares from 7.5 hectares to 35.5 hectares, increasing the permit boundary from 18 hectares to 179 hectares, extending the period in which clearing is authorised and the permit duration by two years, and amending the reporting date to 31 July each year for the duration of the permit.

The following assessment of all principles is inclusive of the original permit area (CPS 6048/1) and the amended permit area (CPS 6048/2). The combined areas will henceforth be referred to as the "application area".

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 not likely to be at variance to this Principle

The application area is located within the Hamersley subregion of the Pilbara Bioregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). This region is described as consisting of mountainous areas of Proterozoic sedimentary ranges and plateaux, dissected by gorges (basalt, shale and dolerite) (CALM, 2002). Mulga low woodland occurs over bunch grasses on fine textured soils in valley floors and *Eucalyptus leucophloia* occurs over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002).

A total of five vegetation communities were identified during a flora and vegetation survey of the application area (Rio Tinto, 2015). Of these five vegetation communities, one is described as rocky hills and slopes, two are described as stony plains, one is described as drainage lines, and one is described as gorges and gullies. Biota (2010a) considered gorge and gully habitat to be of significance due to the potential to act as suitable habitat for several conservation significant fauna. The four remaining communities are considered not likely to act as significant habitat for native fauna species (Biota, 2010a). The five vegetation communities are well represented outside of the application area (Biota, 2010a; Rio Tinto, 2015).

Rio Tinto (2015) estimates that the application area would contain approximately 130 – 160 flora taxa, based on the number of taxa recorded from previous flora surveys (Biota, 2010a; Rio Tinto, 2010). The estimated number of taxa within the application area is within the expected range of an area of this size in this locality and is not considered to represent particularly high species richness. No rare or Threatened flora species were recorded within the application area (Rio Tinto, 2015).

No Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are known to occur within the application area (GIS Database). No TECs or PECs were identified within the application area during a flora and vegetation survey (Rio Tinto, 2015).

A Rio Tinto botanist and consulting botanist from 360 Environmental undertook a flora and vegetation survey of the application area on 10 to 11 July 2015 (Rio Tinto, 2015). No threatened flora were recorded. Five Priority flora species were recorded in the application area:

- *Eremophila* sp. Hamersley Range – Priority 1 as listed by DPaW
- *Indigofera* sp. Bungaroo Creek – Priority 3 as listed by DPaW
- *Sida* sp. Barlee Range – Priority 3 as listed by DPaW
- *Eremophila magnifica* subsp. *magnifica* – Priority 4 as listed by DPaW
- *Acacia bromilowiana* – Priority 4 as listed by DPaW

The five species listed above are all found outside of the application area within and surrounding the greater Hamersley region. Due to the small area applied to be cleared and the distribution of these species outside of the application area, it is unlikely the proposed clearing will have a significant impact on the population of these species. Rio Tinto (2015) advises that an internal restriction zone will be applied around the five species listed above when undertaking exploration activities under this permit, and clearing within this restriction zone will only occur when necessary.

No weed species were recorded during the flora and vegetation survey, however several have the potential to occur (DPaW, 2016; Rio Tinto, 2015). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

Methodology Biota (2010a)
CALM (2002)
DPaW (2016)
Rio Tinto (2010)
Rio Tinto (2015)

GIS Database:
- IBRA WA (Regions – Sub-regions)
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

(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

A fauna habitat assessment by Rio Tinto (2015) identified four fauna habitats within the application area:

- Rocky Hills and Slopes;
- Stony Plains;
- Drainage Lines; and
- Gorges and Gullies.

The habitats listed above are not restricted to the application area and are considered widespread throughout the Pilbara bioregion. Despite its abundance in the surrounding region, the gorge and gully habitat within the application area is considered significant (Biota, 2010b; Rio Tinto, 2015). This is due to its potential to act as suitable habitat for several conservation significant fauna species. The remaining habitats are not considered significant for native fauna.

Rio Tinto (2015) and Biota (2010b) advise that gorge and gully habitat contained within the application area could provide suitable habitat for the Northern Quoll, Pilbara Orange Leaf-nosed Bat, Ghost Bat and the Pilbara Olive Python. To minimise the impact of the proposed clearing activities on these species, a condition has been placed onto the permit preventing the clearing of gorge and gully habitat unless for the creation of access tracks. The other habitat types within the application area are anticipated to serve only as foraging habitat for these species and as such clearing is unlikely to have a significant impact.

Two desktop analyses undertaken as a component of the Vegetation and Fauna Habitat Assessment for Brockman Syncline 2 (Rio Tinto, 2015) and the Brockman 2 Sustaining Tonnes Study Area (Biota, 2010b) identified that the following species of conservation significance have the potential to occur within the application area:

- Northern Quoll (*Dasyurus hallucatus*) – Schedule 2 – Endangered Mammals (EN)
- Ghost Bat (*Macroderma gigas*) – Schedule 3 – Vulnerable Mammals (VU)
- Grey Falcon (*Falco hypleucos)* – Schedule 3 – Vulnerable Birds (VU)
- Pilbara Leaf-nosed Bat (*Rhinonicteris aurantia*) – Schedule 3 – Vulnerable Mammals (VU)
- Pilbara Olive Python (*Liasis olivaceus barroni*) – Schedule 3 – Vulnerable Reptiles (VU)
- Rainbow Bee-eater (*Merops Ornatus*) – Schedule 5 – Migratory Birds (IA)
- Peregrine Falcon (*Falco peregrinus*) – Schedule 7 – Other specially protected fauna (OS)
- Long-tailed dunnart (*Sminthopsis longicauduata*) – Priority 4 as listed by DPaW
- Western Pebble Mound Mouse (*Pseudomys chapmani*) – Priority 4 as listed by DPaW

The fauna habitats present within the application area are not confined to this area and the above species have been recorded over large tracts of Western Australia (DPaW, 2016). It is considered unlikely that the relatively small area of proposed clearing will result in adverse impacts to the conservation status or distribution of any conservation significant fauna species (DPaW, 2016). The implementation of a condition restricting clearing in gorge and gully habitat preventing vegetation clearing unless for the purpose of access tracks will help to minimise any potential impacts to fauna utilising this habitat.

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

Methodology Biota (2010b)
DPaW (2016)
Rio Tinto (2015)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal not likely to be at variance to this Principle

No species of Threatened flora are known to occur within or in close proximity to, the application area (GIS Database). A flora and vegetation survey of the application area did not identify the presence of any Threatened flora (Rio Tinto, 2015).

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

Methodology

Rio Tinto (2015)

GIS Database:
- Threatened and Priority 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.

Comments

Proposal is not likely to be at variance to this Principle

According to available datasets (GIS Database), there are no known Threatened Ecological Communities (TECs) within the application area. No Threatened Ecological Communities were identified during a flora and vegetation survey of the application area (Rio Tinto, 2015). The nearest Threatened Ecological Community (Themeda Grasslands) is located 20km south of the application area (GIS Database).

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

Methodology

Rio Tinto (2015)

GIS Database:
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

(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 at variance to this Principle

The application area occurs within the Pilbara Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 99.5% of pre-European vegetation remains (Government of Western Australia, 2014; GIS Database).

The vegetation within the application area has been mapped as Beard vegetation association 82 (GIS Database). Beard vegetation association 82 is well represented at both a state and bioregional level, as shown in the table below (Government of Western Australia, 2014). Given the amount of vegetation remaining in the local area and bioregion, the vegetation proposed to be cleared is not considered to represent a remnant within an extensively cleared area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Lands
IBRA Bioregion - Pilbara	2,563,585	2,550,898	99.51	Least Concern	~10.6
Beard vegetation associations - State					
82	2,565,901.27	2,553,217.02	~99.5	Least Concern	~ 10.3
Beard vegetation associations - Bioregion					
82	711, 483	710, 255	99.83	Least Concern	~ 7.9

* Government of Western Australia (2014)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology

Department of Natural Resources and Environment (2002)
Government of Western Australia (2014)

GIS Database:
- IBRA Australia
- Pre-European Vegetation

(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 at variance to this Principle

There are no permanent watercourses or wetlands within the application area (GIS Database). Numerous drainage lines are present within the application area (GIS Database; Rio Tinto, 2015). These drainage lines are ephermal, flowing only after major rainfall events (Rio Tinto, 2015). Rio Tinto advises that there is a vegetation community growing in association with these drainage lines (Rio Tinto, 2015).

Based on the above, the proposed clearing is at variance to this principle. However, vegetation associated with the drainage lines is well represented throughout the Pilbara Region (Rio Tinto, 2015). In addition, since the proposed clearing will be undertaken to support a mineral exploration programme, it is likely the cleared areas will be situated throughout the application area and not concentrated within the vegetation communities detailed above. Therefore, the proposed clearing associated with drainage lines is unlikely to have a significant impact.

Based on the above, the proposed clearing is at variance to this Principle.

Methodology

Rio Tinto (2015)

GIS Database:
- 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 application area is situated within the Boolgeeda and Newman land systems (GIS Database).

The Boolgeeda Land System is described as consisting of stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands and mulga shrublands (Van Vreeswyk et al., 2004).

The Newman Land System is described as consisting of rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands (Van Vreeswyk et al., 2004).

Neither the Boolgeeda nor Newman Land System is considered to be susceptible to erosion (Van Vreeswyk et al., 2004)

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

Methodology

Van Vreeswyk et al. (2004)

GIS Database:
- Landsystem Rangelands

(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 nearest DPaW managed land is Karijini National Park located approximately 73 kilometres east of the application area (GIS Database). When the distances between the application area and conservation areas are considered, it is not anticipated that the clearing activities will result in any adverse impact to the environmental values of any conservation area.

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

Methodology

GIS Database:
- DPaW Tenure

Officer

Lauren Stirbinskis

(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 situated approximately 26 kilometres to the southwest of the nearest Public Drinking Water Source Area (PDWSA), the Priority 2 Millstream Water Reserve (GIS Database). Due to the surficial nature of the clearing activities, it is not anticipated that the proposed activities will result in adverse impacts to the quality of groundwater sources underlying the application area.

The likely impact of the clearing activities on surface water quality would be the contribution of additional sediment to surface water flows. However, as the application area is situated on landforms which are inherently erosion resistant (Van Vreeswyk et al., 2004), it is not anticipated that the contribution of sediment to surface water flows will be significant. In addition, surface water flows in the Pilbara region usually carry a sediment load. Therefore, the contribution of additional sediment to surface water flows from the cleared areas is unlikely to result in significant adverse impacts to surface water quality. Furthermore, the proposed activities will be temporary in nature and the proponent will be required to rehabilitate the areas at the completion of the mineral exploration programme. Therefore, any impact to surface water quality caused by the contribution of additional sediment from the cleared areas will be temporary in nature.

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

Methodology Van Vreeswyk et al. (2004)

GIS Database:
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas

(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 application area is situated within the Ashburton River Catchment which is approximately 7,877,743 hectares in size (GIS Database). When the small area of the proposed clearing is considered alongside the size of the Ashburton River catchment and the Pilbara regions natural propensity for flooding, no change to the incidence or intensity of flooding in the surrounding region is anticipated to result from the proposed clearing activities.

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

Methodology GIS Database:
- Hydrographic Catchments – Catchments

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There is one native title claim (WC1997/089) over the area under application (DAA, 2016). This claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. 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 (DAA, 2016). 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 22 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology DAA (2016)

3. References

Biota Environmental Sciences (2010a) Brockman Syncline 2 Sustaining Tonnes Project and Pit 7 Land Bridge Vegetation and Flora Survey. Report prepared for Rio Tinto Iron Ore Pty Ltd, by Biota Environmental Sciences Pty Ltd, August 2010.

Biota Environmental Sciences (2010b) Brockman 2 Sustaining Tonnes targeted fauna survey. Report prepared for Rio Tinto Iron Ore Pty Ltd, by Biota Environmental Sciences Pty Ltd, June 2010.

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

DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed 9 March 2016).

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.

DPaW (2016) NatureMap. Department of Parks and Wildlife. http://naturemap.dec.wa.gov.au (Accessed 9 March 2016)

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Department of Environment and Conservation, Western Australia, June 2014.

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

Rio Tinto (2010) Flora and Vegetation Assessment of the South West Detritals Study Area. Rio Tinto Iron Ore Pty Ltd, Western Australia

Rio Tinto (2015) Desktop Flora, Vegetation and Fauna Habitat Assessment at Brockman Syncline 2, South West Extension. Rio Tinto Iron Ore Pty Ltd, Western Australia, December 2015.

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, Western Australia.

4. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department 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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T **Threatened species:**
Published as Specially Protected under the *Wildlife Conservation Act 1950,* listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

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. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN **Endangered species**
Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU **Vulnerable species**
Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX **Presumed extinct species**
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA **Migratory birds protected under an international agreement**
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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD **Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS **Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P **Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and 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 th 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, rar flora.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for th 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 tha has been extensively cleared.

(f) 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 lan degradation.

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on th 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 th quality of surface or underground water.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, th incidence or intensity of flooding.