

## **Clearing Permit Decision Report**

### 1. Application details

I.1. Permit application details

Permit application No.: 7076/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Cliffs Asia Pacific Iron Ore Pty Ltd

1.3. Property details

Property: Mining Lease 77/607

Colloquial name: Koolyanobbing Range E Deposit Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of: 14.24 Mechanical Removal Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 14 July 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. Two Beard vegetation associations are located within the application area (GIS Database):

141: Medium woodland; York gum, salmon gum and gimlet; and

520: Shrublands; Acacia quadrimarginea thicket

A Level 2 flora and vegetation survey was undertaken within the application area from August to September of 2013 by Woodman Environmental Consulting Pty Ltd (Woodman Environmental Consulting, 2014). Two vegetation units were recorded within the application area:

Unit 9: Low open mallee woodland dominated by *Eucalyptus loxophleba* subsp. *lissophloia* over tall open to sparse shrubland of mixed species dominated by *Acacia* sp. Mt Jackson (B. Ryan 176), *Acacia* sp. narrow phyllode (B.R Maslin 7831), *Acacia tetragonophylla* and *Allocasuarina acutivalvis* subsp. *acutivalvis* over mid open shrubland dominated by *Scaevola spinescens*, *Eremophila oppositifolia* subsp. *angustifolia*, *Grevillea zygoloba*, *Dodonaea inaequifolia* and *Philotheca brucei* subsp. *cinerea* over low sparse shrubland dominated by *Dodonaea microzyga* var. *acrolobata*, *Olearia pimeleoides*, *Prostanthera semiteres* subsp. *semiteres* and *Olearia muelleri* on red, redbrown, orange-brown, or brown clay or clay-loam with ironstone stones, occasionally with banded ironstone outcropping, on mid to lower slopes of ranges and low rises.

Unit 11: Low isolated trees and mallees of *Eucalyptus longissima*, *Banksia arborea* and *Brachychiton gregorii* over tall shrubland to open shrubland dominated by *Acacia* sp. Mt Jackson (B. Ryan 176) and *Allocasuarina eriochlamys* subsp. *eriochlamys* or *Allocasuarina acutivalvis* subsp. *acutivalvis* over mid open to sparse shrubland dominated by *Philotheca brucei* subsp. *brucei*, *Grevillea zygoloba*, *Eremophila clarkei*, *Scaevola spinescens* and *Leucopogon* sp. Clyde Hill (M.A Burgman 1207) over low sparse shrubland of mixed species including *Olearia humilis*, *Prostanthera althoferi* subsp. *althoferi*, *Hibbertia exasperata* and *Dianella revoluta* var. *divaricata* on red, red-brown or brown clay or clay-loam with ironstone stones, usually with banded ironstone outcropping, on the crests and slopes of ranges.

**Clearing Description** 

Koolyanobbing Range E Deposit Project.

Cliffs Asia Pacific Iron Ore Pty Ltd proposes to clear up to 14.24 hectares of native vegetation within a total boundary of the same size, for the purpose of mineral production. The project is located approximately 50 kilometres north-northeast of Southern Cross, in the Shire of Yilgarn.

**Vegetation Condition** 

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

To:

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

Comment

Vegetation condition was derived from a flora and vegetation survey conducted by Woodman Environmental Consulting (2014).

The proposed clearing is to allow for a haul road and mining of the Koolyanobbing Range E deposit.

## 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 may be at variance to this Principle

The application area is located within the Southern Cross subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation can be described as Eucalyptus woodlands rich in endemic eucalypts around chains of playa-lakes, *Borya constricta* with stands of *Acacia accuminata* and *Eucalyptus loxophleba* on mid-levels of granite basement outcrops with mallees and scrubheaths on the uplands (CALM, 2002).

The application area is located within the Koolyanobbing Range (GIS Database). The Koolyanobbing Range supports one of the two major concentrations of endemic or near endemic flora in Western Australia (DPaW, 2016a). The range contains a large number of specialist ironstone taxa listed as Priority flora and has been identified as a range comprising the highest level of biodiversity and landscape conservation value by the Government of Western Australia (DPaW, 2016a).

The Koolyanobbing Range provides critical habitat for a number of vegetation units that have extremely restricted distributions (DPaW, 2016a). A flora and vegetation survey undertaken by Woodman Environmental Consulting (2014) identified two vegetation units within the application area, unit 9 and unit 11, as described in the vegetation description above. The proposed clearing (14.24 hectares) will impact approximately 1% of unit 9 and 3% of unit 11 when compared against the known size of the units within the Koolyanobbing Range (Cliffs, 2016). Given the small local impact the clearing will have on both vegetation units, it is unlikely that the proposed clearing will have a significant impact on the biodiversity of the area or result in a significant loss of fauna habitat.

The application area is located within a Priority 1 Ecological Community (PEC), the Koolyanobbing Range Complex (GIS database). The total area of the PEC as currently mapped is 2531 hectares (DPaW, 2016a). Advice from the Department of Parks and wildlife (DPaW) is that the small area of clearing proposed under this application (14.24 hectares) is unlikely to cause a significant impact to the PEC (DPaW, 2016a). However, the cumulative impact of previous and potential ground disturbing activities will contribute to the continued decline of the condition and extent of the PEC as the result of further loss of vegetation and habitat, weed introduction and spread, altered hydrology, habitat fragmentation, and soil degradation (DPaW, 2016a). Future mining proposals and clearing permit applications within the Koolyanobbing range should consider cumulative impacts to the PEC.

A flora and vegetation survey undertaken by Woodman Environmental Consulting (2014), identified four flora species of conservation significance within the application area:

- Hibbertia lepidocalyx subsp. tuberculata Priority 3 as listed by DPaW
- Lepidosperma ferricola Priority 3 as listed by DPaW
- Stenanthemum newbeyi Priority 3 as listed by DPaW
- Banksia arborea Priority 4 as listed by DPaW

Advice from DPaW is that when considering the proposed clearing in isolation, impacts to the above flora species are unlikely to be significant (DPaW, 2016c). However, it is worth noting that the proponent has had several previous impacts on these four species and has the potential for further impacts due to other proposed clearing activities within the Koolyanobbing Range. The adjacent F deposit project (currently under EPA assessment) by the proponent is also proposing to impact the above four species (DPaW, 2016c). If both proposals proceed (Koolyanobbing range E deposit and F deposit), the impacts of clearing in the Koolyanobbing Range have the potential to be significant to the conservation of the above flora species at the local level (DPaW, 2016c). The OEPA was informed of the decision to approve this clearing permit and was provided DPaW's advice, given their continued assessment of the F deposit project.

No Threatened or Declared Rare Flora was recorded within the application area during a flora and vegetation survey (Woodman Environmental Consulting, 2014).

Several weed species have been recorded throughout the Koolyanobbing Range (Woodman Environmental Consulting, 2014). 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 may be at variance to this Principle.

### methodology CALM (2002)

Cliffs (2016) DPaW (2016a) DPaW (2016c)

Woodman Environmental Consulting (2014)

#### GIS Database:

- IBRA WA (Regions Sub-regions)
- Pre-European Vegetation
- Threatened Ecological Sites Buffered

## (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 may be at variance to this Principle

A vertebrate fauna assessment over part of the Koolyanobbing Range including the application area was undertaken by Biota in April and October of 2013 (Biota, 2014). A total of 106 vertebrate fauna from 45 families were recorded, including six mammals, 29 birds, nine reptiles and one amphibian family (Biota, 2014). The following fauna species of conservation significance were recorded in or near the application area:

- Leipoa ocellata (Malleefowl) Schedule 3, Vulnerable (VU)
- Merops ornatus (Rainbow bee-eater) Schedule 5, Migratory (IA)
- Falco peregrinus (Peregrine Falcon) Schedule 7, Other specially protected fauna (OS)
- Aganippe castellum (Tree-stem Trapdoor Spider) Priority 4 as listed by DPaW

The Rainbow Bee-eater is listed as a migratory species and is widely distributed throughout Australia (DPaW, 2016b). Given that the Rainbow Bee-eater has a large range and a large population that appears to be stable, significant impacts to this species as a result of the proposed clearing are considered unlikely.

The Peregrine Falcon is a wide ranging species and is not confined to a specific habitat (DEHP, 2016). Therefore they are unlikely to be reliant on the small scale of vegetation (14.24 hectares) within the application area (DPaW, 2016b).

The Malleefowl is a threatened species listed as a Matter National of Environmental Significance (MNES) under the EPBC act (DPaW, 2012). Biota (2014) did not find any active mounds within or in close proximity to the application area. However, several old mounds were recorded were recorded within close proximity to the application area (Biota, 2014) and it is known that Malleefowl return to reuse old mounds and build new ones (DPaW, 2016b). Therefore, it is possible that an active Malleefowl mound may be within or in close proximity to the application area when clearing occurs (DPaW, 2016b). Potential impacts to Malleefowl as a result of the proposed clearing may be minimised by the implementation of a Malleefowl management condition.

The Tree-stem Trapdoor Spider occurs mainly in bushland remnants within the regional area, including conservation estates. Advice from DPaW is that the proposed clearing is unlikely to significantly impact the Tree-stem Trapdoor Spider (DPaW, 2016b).

Biota (2014) identified three fauna species that were referred to as being "reliant on ironstone habitat regionally":

- Artamus minor (Little Woodswallow)
- Pachycephala inormata (Gilbert's Wristler)
- Cyclodomorphus melanops (Slender Blue-tongue)

DPaW has advised that these species are unlikely to be significantly impacted given their wide distribution and the small scale of clearing proposed (DPaW, 2016b).

Biota (2014) also refers to having found secondary traces of *Bettongia lesueur* (Burrowing Bettong) and *Leporillus conditor* (Greater Stick-nest Rat). Both species are assumed to be extinct in the region. Evidence of extinct species are of interest to DPaW. Advice from DPaW (2016b) is that further evidence is required, but the secondary traces are considered likely to be from another species.

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

### Methodolgy

Biota (2014) DEHP (2016) DPaW (2012) DPaW (2016b)

## (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 the application area (GIS Database). A flora and vegetation survey of the application area did not identify the presence of any Threatened flora (Woodman Environmental Consulting, 2014).

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

### Methodology Woodman Environmental Consulting (2014)

### 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

No Threatened Ecological Communities (TECs) are known to occur within the application area (GIS Database). A flora and vegetation survey of the application area did not identify the presence of any TECs (Woodman Environmental Consulting, 2014).

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

## Methodology Woodman Environmental Consulting (2014)

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 Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 97.9% of pre-European vegetation remains (GIS Database; Government of Western Australia, 2014).

The vegetation within the application area has been mapped as Beard vegetation associations 141 and 520 (GIS Database). Beard vegetation associations 141 and 520 are 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<br>area (ha)* | Current extent (ha)* | Remaining %* | Conservation<br>Status** | Pre-European % in<br>DPaW Managed<br>Lands |
|-------------------------------|----------------------------|----------------------|--------------|--------------------------|--|
| IBRA Bioregion - Coolgardie   | 12,912,204                 | 12,648,491           | 97.96        | Least Concern            | ~16.20                                     |
| Beard vegetation associations |                            |                      |              |                          |  |
| - State                       |                            |                      |              |                          |  |
| 141                           | 1,158,760                  | 960,758              | 82.91        | Least Concern            | ~ 40.02                                    |
| 520                           | 37,922                     | 37, 369              | 98.54        | Least Concern            | ~ 44.63                                    |
| Beard vegetation associations |                            |                      |              |                          |  |
| - Bioregion                   |                            |                      |              |                          |  |
| 141                           | 883,085                    | 858,525              | 97.22        | Least Concern            | ~ 44.62                                    |
| 520                           | 37,128                     | 36,575               | 98.51        | Least Concern            | ~ 45.60                                    |

<sup>\*</sup> Government of Western Australia (2014)

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

<sup>\*\*</sup> Department of Natural Resources and Environment (2002)

#### Methodology

Department of Natural Resources and Environment (2002)

Government of Western Australia (2014)

GIS Database:

- IBRA WA (Regions Sub-regions)
- 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 not at variance to this Principle

According to available databases, there are no permanent or ephemeral watercourses or wetlands within the application area (GIS Database). The vegetation proposed to be cleared is not growing in association with any watercourses or wetlands (Cliffs, 2016; GIS Database). The nearest significant water body is Lake Seabrook, located approximately 9 kilometres South East of the application area (GIS Database).

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

### Methodology

Cliffs (2016)

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 Koolyanobbing Range is similar to most Banded Ironstone Formations (BIF's) of the Yilgarn Craton which are characterised by a stony surface mantle which provides effective protection against soil erosion (Government of Western Australia, 2007). The disturbance or removal of this stony mantle may initiate soil erosion. However, given the poor soil coverage on BIF's there is likely to be a minimal amount of erodible material within the application area (Government of Western Australia, 2007).

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

### Methodology

Government of Western Australia (2007)

## (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

According to available databases, the application area is not located within a conservation area or DPaW managed land (GIS Database). The nearest known conservation area is an un-named Class A nature reserve located approximately 13 kilometres west of the application area (GIS Database). Based on the distance between the application area and the nearest nature reserve, the application area is not likely to impact on the environmental values of any conservation areas.

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

### Methodology

GIS Database:

- DPaW Tenure

# (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

According to available databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database).

The application area lies within the Goldfields Groundwater Area (GIS Database). Groundwater within the application area is saline, between 14,000 - 35,000 milligrams per litre of dissolved salts (GIS Database). Given the groundwater is already saline, the small amount of clearing proposed is unlikely to alter existing groundwater quality.

Given that there is low average rainfall (300 millilitres) in the Koolyanobbing area (BoM, 2016) and there are no watercourses within the application area, the proposed clearing is not likely to cause sedimentation or deteriorate the quality of surface water in nearby areas.

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

### Methodology BoM (2016)

GIS Database:

- Groundwater Salinity, Satewide
- Hydrography, linear
- 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 receives an average annual rainfall of approximately 300 millimetres (BoM, 2016). Based on an average annual evaporation rate of 2600 – 2800 millimetres (BoM, 2016), any surface water resulting from rainfall events is likely to be relatively short lived.

The application area is located within the Swan Avon/Yilgarn River catchment area which covers 5,836,045 hectares (GIS Database). Given the size of the area to be cleared (14.24 hectares) in relation to the size of the catchment area, the proposed clearing is not likely to increase the incidence or intensity of flooding.

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

#### Methodology

BoM (2016)

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 are no native title claims over the application area (DAA, 2016). 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 (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 6 June 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

### Methodology D

DAA (2016)

### 4. References

- Biota (2014) Southern Koolyanobbing Range Vertebrate Fauna Survey. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Biota Environmental Sciences, February 2014.
- BoM (2016) Climate Statistics for Australian Locations, Wiluna. Bureau of Meteorology. http://www.bom.gov.au (Accessed 12 July 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia
- Cliffs (2016) Yilgarn Operations, Koolyanobbing Range E deposit. Cliffs Asia Pacific Iron Ore Pty Ltd , Western Australia, May 2016.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed 12 July 2016).
- DEHP (2016) Peregrine Falcon. Department of Heritage Protection Queensland. https://www.ehp.qld.gov.au (Accessed 12 July 2016)
- DPaW (2012) Fauna Profiles Malleefowl. Department of Parks and Wildlife. <a href="https://www.dpaw.wa.gov.au">https://www.dpaw.wa.gov.au</a> (Accessed 12 July 2016)
- DPaW (2016a) Advice received in relation to Clearing Permit CPS 7076/1. Department of Parks and Wildlife, Western Australia, 10 June 2016.
- DPaW (2016b) Advice received in relation to Clearing Permit CPS 7076/1. Department of Parks and Wildlife, Western Australia, 21 June 2016.
- DPaW (2016c) Advice received in relation to Clearing Permit CPS 7076/1. Department of Parks and Wildlife, Western Australia, 1 July 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
- Government of Western Australia (2007) Strategic Review of the Conservation and Resource Values of the Banded Iron Formations of the Yilgarn Craton. Department of Environment and Conservation and Department of Industry and Resources, Perth, Western Australia.
- 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.
- Woodman Environmental Consulting (2014) Southern Koolyanobbing Range, Flora and Vegetation Assessment. Report prepared for Cliffs Asia Pacific Iron Ore Pty Ltd, by Woodman Environmental Consulting, February 2014.

## 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

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 the 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 the 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.