

# **Clearing Permit Decision Report**

# 1. Application details

# 1.1. Permit application details

Permit application No.: 4615/7
Permit type: Purpose

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Iron Ore (Mount Bruce) Agreement Act 1972, Mineral Lease 252SA (AML 70/252)

Local Government Area: Shire of East Pilbara
Colloquial name: Koodaideri Project

1.4. Application

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

750 Mechanical Clearing Mineral exploration, hydrogeological drilling, geotechnical investigations, construction camp and

associated activities

1.5. Decision on application

Decision on Permit Application: Grant

**Decision Date:** 24 November 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 and are useful to look at vegetation in a regional context. Two Beard vegetation associations have been mapped within the application area (GIS Database):

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

111: Hummock grasslands, shrub steppe; Eucalyptus gamophylla over hard spinifex.

There have been numerous flora and vegetation surveys undertaken over the Koodaideri area and surrounding areas since 2011. Based on those surveys and a recent flora and vegetation survey by Rio Tinto (2015; 2016), the following vegetation associations have been identified within the application area (Biota, 2012; Eco logical, 2014; Rio Tinto, 2015; Rio Tinto, 2016):

# Vegetation of Foothills, Slopes and Hillslopes

**AanEITspsTHt** - Acacia aneura, Eucalyptus leucophloia scattered low trees over *Triodia* sp. Shovelanna Hill open hummock grassland over *Themeda triandra* tussock grassland;

**AarAspTspsTw** - *Acacia arida* tall open shrubland over *Acacia spondylophylla* low shrubland over *Triodia* sp. Shovelanna Hill, *Triodia wiseana* hummock grassland;

**AiGwTlaTp -** Acacia inaequilatera, Grevillea wickhamii open shrubland over Triodia lanigera, Triodia pungens open hummock grassland;

**AprGwAarAspTsps** - Acacia pruinocarpa, Grevillea wickhamii, Acacia arida tall open scrub over Acacia spondylophylla scattered low shrubs over Triodia sp. Shovelanna Hill open hummock grasslands;

**ChAiGwTsps/Te/Tw** - Corymbia hamersleyana scattered low trees over Acacia inaequilatera, Grevillea wickhamii scattered tall shrubs over *Triodia* sp. Shovelanna Hill or *Triodia* epactia or *Triodia wiseana* hummock grassland;

**EIAbTwTsps** - Eucalyptus leucophloia scattered low trees over Acacia bivenosa open shrubland over Triodia wiseana, Triodia sp. Shovelanna Hill hummock grassland;

**ElAhi AarTspsTe** - *Eucalyptus leucophloia* scattered low trees over *Acacia hilliana*, *Acacia arida* low shrubland over *Triodia* sp. Shovelanna Hill, *Triodia epactia* open hummock grassland;

**ElAspTsps** - Eucalyptus leucophloia scattered low trees over Acacia spondylophylla low open shrubland over *Triodia* sp. Shovelanna Hill hummock grassland;

**EIChAmTw** - Eucalyptus leucophloia, Corymbia hamersleyana low open woodland over Acacia maitlandii low shrubland over *Triodia wiseana* hummock grassland;

EIChGwAprTsps - Eucalyptus leucophloia, Corymbia hamersleyana scattered low trees over Grevillea wickhamii, Acacia pruinocarpa scattered shrubs over Triodia sp. Shovelanna Hill hummock grassland;

**EIEGEKTW** - Eucalyptus leucophloia low woodland over Eucalyptus gamophylla, Eucalyptus kingsmillii scattered low mallees over *Triodia wiseana* open hummock grassland;

**EIEgHcGwAspAarTspsTw** - Eucalyptus leucophloia, Eucalyptus gamophylla scattered low trees over Hakea chordophylla, Grevillea wickhamii tall open scrub over Acacia spondylophylla, Acacia arida shrubland over Triodia sp. Shovelanna Hill, Triodia wiseana open hummock grassland; and

**EIGwAhiAspTwTsps** - *Eucalyptus leucophloia* low woodland over *Grevillea wickhamii* scattered shrubs over *Acacia hilliana*, *Acacia spondylophylla* scattered low shrubs over *Triodia* sp. Shovelanna Hill open hummock grassland.

#### Vegetation of Creeks, Gullies and Gorges

**AiGpTeCEc** - Acacia inaequilatera, Grevillea wickhamii tall shrubland over *Triodia epactia* hummock grassland over \*Cenchrus ciliaris tussock grassland;

**AprGwCEcTe** - Acacia pruinocarpa, Grevillea wickhamii tall shrubland over \*Cenchrus ciliaris tussock grassland over Triodia epactia open hummock grassland;

**AprApyAThCEc** - Acacia pruinocarpa scattered trees over Acacia pyrifolia, Atalaya hemiglauca shrubland over \*Cenchrus ciliaris tussock grassland;

**ApyGwAThGOrTErCEcTe** - Acacia pyrifolia, Grevillea wickhamii, Atalaya hemiglauca, Gossypium robinsonii tall open scrub over *Tephrosia rosea* scattered low shrubs over \*Cenchrus ciliaris tussock grassland over *Triodia epactia* open hummock grassland;

**AtuAThGwApyTErCEc** - Acacia tumida, Atalaya hemiglauca, Grevillea wickhamii, Acacia pyrifolia tall open scrub over *Tephrosia rosea* low open shrubland over \*Cenchrus ciliaris tussock grassland; and

**ChApyAtuTErCEc** - Corymbia hamersleyana scattered low trees over Acacia pyrifolia, Acacia tumida tall closed shrubland over Tephrosia rosea low open shrubland over Setaria sp. closed tussock grassland.

#### Vegetation of Stony Hills and Slopes

**H4:** Eucalyptus leucophloia scattered low trees over Acacia bivenosa scattered shrubs over Triodia wiseana, T. sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock grassland;

**H5:** Eucalyptus leucophloia low open woodland over *Grevillea wickhamii* scattered tall shrubs over *Acacia hilliana*, *A. spondylophylla* scattered low shrubs over *Triodia wiseana*, *T.* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock grassland;

- H10: Eucalyptus leucophloia scattered low trees over Triodia brizoides hummock grassland;
- **H13:** Acacia arida tall open shrubland over A. spondylophylla low shrubland over Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), T. wiseana hummock grassland;
- H17: Eucalyptus leucophloia, Corymbia hamersleyana low open woodland over Acacia maitlandii low shrubland over Triodia wiseana hummock grassland;
- H18: Eucalyptus leucophloia, Corymbia hamersleyana scattered low trees over Grevillea wickhamii, Acacia pruinocarpa scattered shrubs over Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland;
- **H19:** Eucalyptus leucophloia, E. gamophylla scattered low trees over Hakea chordophylla, Grevillea wickhamii tall open scrub over Acacia spondylophylla, A. arida shrubland over Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), T. wiseana open hummock grassland;
- **H20:** Eucalyptus leucophloia low woodland over E. gamophylla, E. kingsmillii scattered low mallees over Triodia wiseana open hummock grassland;
- **H21:** Acacia aneura, A. pruinocarpa low woodland over *Triodia pungens, T.* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock grassland;
- **H22:** Acacia aptaneura, A. pruinocarpa low woodland over Eremophila jucunda open shrubland over Triodia sp. Shovelanna Hill (S. van Leeuwen 3835);
- H24: Eucalyptus leucophloia scattered low trees over Triodia pungens hummock grassland; and

Eucalyptus leucophloia subsp. leucophloia open woodland to scattered trees with occasional Eucalyptus gamophylla and Corymbia deserticola subsp. deserticola over Grevillea wickhamii subsp. aprica and Hakea chordophylla high open shrubland over Acacia spondylophylla and Tephrosia arenicola low open shrubland over Triodia wiseana and Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland on high rocky hills and slopes.

# Vegetation of Stony Plains

P3: Mixed Acacia species, Hakea chordophylla, Grevillea wickhamii tall open shrubland over Triodia lanigera, T. pungens open hummock grassland;

P5: Corymbia hamersleyana scattered low trees over Eucalyptus gamophylla scattered low mallees over Acacia inaequilatera, Grevillea wickhamii tall open shrubland over Triodia lanigera, T. epactia, T. pungens open hummock grassland; and

**P35:** Corymbia hamersleyana scattered low trees over Acacia inaequilatera, Grevillea wickhamii scattered tall shrubs over Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), T. epactia, T. wiseana hummock grassland.

### Vegetation of Drainage Lines

**D2:** Acacia tumida, A. pyrifolia tall open shrubland over *Tephrosia rosea*, *Indigofera monophylla* open shrubland over \*Cenchrus ciliaris open tussock grassland with *Triodia pungens* open hummock grassland;

**D3:** Corymbia hamersleyana scattered low trees over Acacia bivenosa, A. ancistrocarpa, A. pyrifolia tall open shrubland over \*Cenchrus ciliaris very open tussock grassland to closed tussock grassland with Triodia epactia, T. pungens, T. lanigera open hummock grassland;

**D5:** Corymbia hamersleyana scattered low trees over Acacia tumida, A. pyrifolia, Grevillea wickhamii tall open shrubland over \*Cenchrus ciliaris very open tussock grassland with Triodia epactia, T. pungens very open hummock grassland;

**D8:** Acacia pyrifolia, Grevillea wickhamii, Atalaya hemiglauca, Gossypium robinsonii tall open scrub over *Tephrosia rosea* scattered low shrubs over \*Cenchrus ciliaris tussock grassland with *Triodia epactia, T. pungens* open hummock grassland;

**D9:** Corymbia hamersleyana scattered low trees over Eucalyptus gamophylla scattered low mallees over Acacia tumida, Grevillea wickhamii tall shrubland over Triodia epactia, T. pungens very open hummock grassland

**D24:** Acacia pruinocarpa, Grevillea wickhamii tall shrubland over \*Cenchrus ciliaris tussock grassland with Triodia epactia, T. pungens open hummock grassland;

**D35:** Acacia aneura, Eucalyptus leucophloia scattered low trees over *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) open hummock grassland with *Themeda triandra* tussock grassland;

**D36:** Acacia inaequilatera, Grevillea wickhamii tall shrubland over Triodia epactia hummock grassland with \*Cenchrus ciliaris tussock grassland;

**D39:** Corymbia hamersleyana low open woodland over Acacia tumida var. pilbarensis, Petalostylis labicheoides tall open scrub over Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186) low open shrubland over Triodia pungens scattered hummock grasses;

D40: Eucalyptus victrix scattered trees over \*Cenchrus ciliaris tussock grassland; and

Eucalyptus gamophylla and Corymbia hamersleyana open woodland to scattered trees over Acacia tumida var. pilbarensis, Grevillea wickhamii subsp. aprica and Acacia inaequilatera high shrubland over Triodia pungens and Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) hummock grassland and Themeda triandra open tussock grassland on plains and minor drainage lines.

# Vegetation of Gorge/Gullies

**D37:** Corymbia ferriticola, Eucalyptus leucophloia low open forest over Acacia tumida tall shrubland over Triodia epactia hummock grassland; and

**D38:** Mosaic of riparian vegetation types associated with a narrow gorge and spring. The vegetation units present at this location ranged from *Eucalyptus camaldulensis* forest over closed sedgeland, to closed canopy *Ficus virens* communities.

# **Mosaic Units**

**Gully Mosaic -** Deep gullies with different microclimates within the study area supported variable vegetation units at a scale too fine to map individually;

**Koodaideri spring -** This mapping unit comprised a mosaic of riparian vegetation types associated with a narrow gorge; and

# **Disturbed Areas**

**HD** Previously cleared areas.

\* indicates a weed species.

### **Clearing Description**

Koodaideri Project.

Hamersley Iron Pty Ltd proposes to clear up to 750 hectares within a total boundary of approximately 17,291 hectares for the purposes of mineral exploration, hydrogeological drilling, geotechnical investigations, construction camp and associated activities. The project is located approximately 70 kilometres south east of Wittenoom, in the Shire of East Pilbara.

# **Vegetation Condition**

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

to

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

#### Comment

The proposed clearing is for a wide range of purposes including mineral exploration, hydrogeological drilling, geotechnical investigations, construction camp and associated activities (Rio Tinto, 2015).

Clearing Permit CPS 4615/1 was granted by the Department of Mines and Petroleum on 8 December 2011 and authorised the clearing of up to 167 hectares of native vegetation within a boundary of approximately 6,941 hectares. This permit was amended on 4 April 2013 to increase the amount of clearing approved to 244 hectares, and increase the boundary to 6,945 hectares to allow for additional exploration drilling, geotechnical investigation activities and camp construction. This permit was amended again on 23 May 2013 to correct an error on Plan 4615/2. Clearing Permit CPS 4615/3 was amended on 31 May 2013. The purpose of this amendment was to increase the clearing permit boundary from 6,945 hectares to 7,070 hectares. The amount of clearing authorised remained the same. Clearing permit 4615/4 was amended on 22 October 2015 to extend the period in which clearing is authorised, extend the duration of the permit to 31 July 2026, increase the amount of clearing from 244 to 265 hectares and increase the clearing permit boundary from 7,070 to 7,150 hectares, to allow for additional exploration drilling.

Clearing permit 4615/5 was amended on 4 February 2016 to increase the amount of clearing from 265 to 700 hectares and increase the clearing permit boundary from 7,150 to 15,979 hectares. The amendment allowed for additional hydrogeological drilling and associated activites. The amendment area covered the previous clearing permit (CPS 4615/5) and clearing permits CPS 2725/3 and CPS 5315/3, which were previously granted over the area.

An application to amend CPS 4615/6 was received on 19 September 2016 to increase the amount of clearing from 700 hectares to 750 hectares, increase the permit boundary to 17,291 hectares, extend the permit duration, and amend the reporting period and date.

# 3. Assessment of application against clearing principles

#### Comments

Hamersley Iron Pty Ltd has applied to increase the area permitted to clear from 700 hectares to 750 hectares, and to increase the permit boundary from 15,979 hectares to 17,291 hectares. The amendment also includes amending the duration of the permit, reporting period and reporting date.

The flora and vegetation survey within the amended permit boundary identified 12 vegetation associations, none of which are associated with a Threatened or Priority Ecological Community (Rio Tinto, 2016).

A flora and vegetation survey by Rio Tinto (2016) over the amendment area identified 204 native taxa from 69 genera representing 34 families. No Threatened Flora species were identified, however additional records of the Priority 1 Flora species *Synostemon hamersleyensis* and Priority 4 Flora species *Acacia bromilowiana* were identified within the amendment area (Rio Tinto, 2016). There were five individuals from two locations of *A. bromilowiana* recorded within the amendment area. This species is not considered to be restricted to the area, and according to the Rio Tinto database, approximately 2,051 individuals occur within the Pilbara Bioregion (Rio Tinto, 2016). The proposed clearing of five individuals of *A. bromilowiana* is unlikely to impact the conservation significance of this species. Approximately 781 individuals of *S. hamersleyensis* were recorded within the amendment area, and these are considered locally significant and will be avoided by Hamersley Iron (Rio Tinto, 2016). Potential impacts to this Priority Flora species as a result of the proposed clearing may be minimised by expanding the existing flora management condition to include these additional records.

Faunal habitats within the amendment area are the same as those that occur within the existing permit boundary (Rio Tinto, 2015; 2016). More significant gorge/gully habitat occurs within the amendment area where the habitat provides potential denning and higher use foraging opportunities for several conservation significant fauna as identified within previous decision reports (Rio Tinto, 2016). Potential impacts to conservation significant fauna species as a result of the proposed clearing may be minimised by the implementation of an existing restricted clearing condition.

A total of three Western Pebble-mound Mouse (*Pseudomys chapmani*) (Priority 4) mounds (2 active, 1 inactive) were recorded within the amendment area (Rio Tinto, 2016). This species is well distributed within the Pilbara region, and it is unlikely that the proposed clearing will impact on the conservation significance of this species. Impacts to these mounds will be avoided by the proponent where practicable (Rio Tinto, 2016).

A number of weed species have been identified throughout the amendment area (Rio Tinto, 2016). Clearing activities have the potential to result in an increase in the incidence of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of an existing weed management condition.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*. The assessment against the clearing principles remains unchanged, and further information can be found in previous decision reports.

#### Methodology

Rio Tinto (2015) Rio Tinto (2016)

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

#### Comments

There is one native title claim (WC2005/006) over the application area (Department of Aboriginal Affairs, 2016). This claim has been registered with the National Native Title Tribunal on behalf of the claimant groups. 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 (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*.

According to available databases, there are numerous registered Aboriginal sites of significance within the application area (Department of Aboriginal Affairs, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, 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.

It is noted that the proposed clearing may impact on a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of the Environment and Energy for environmental impact assessment under the *EPBC Act*. The proponent is advised to contact the Department of the Environment and Energy for further information regarding notification and referral responsibilities under the *EPBC Act*.

The clearing permit application was advertised on 3 October 2016 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received stating no objection to the proposed clearing.

Methodology Department of Aboriginal Affairs (2016)

# 4. References

Biota (2012) Vegetation and Flora Survey of the Koodaideri Study Area. Report prepared for Rio Tinto Iron Ore, by Biota Environmental Sciences. October 2012.

Department of Aboriginal Affairs (2016) Aboriginal Heritage Enquiry System. Government of Western Australia, http://maps.dia.wa.gov.au/AHIS2/. (Accessed 1 November 2016).

Eco logical (2014) Koodaideri Biological Assessment. Eco Logical Australia Pty Ltd, West Perth, Western Australia.

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 (2015) Desktop Flora, Vegetation and Fauna Habitat Assessment at Koodaideri. Native Vegetation Clearing Permit Application Supporting Report. Rio Tinto Iron Ore, Western Australia, December 2015.

Rio Tinto (2016) Flora, Vegetation and Fauna Habitat Assessment at Koodaideri. Native Vegetation Clearing Permit Application Supporting Report. Rio Tinto Iron Ore, Western Australia, August 2016.

# 5. 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)

**DEE** Department of the Environment and Energy, Australian Government

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

**DRF** Declared Rare Flora

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

**DoW** Department of Water, Western Australia

**DPaW** Department of Parks and Wildlife, Western Australia

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

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 the maintenance of, a significant habitat for fauna indigenous to Western Australia.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.