

# **Clearing Permit Decision Report**

# 1. Application details

1.1. Permit applica	tion details			
Permit application No.:	5926/3			
Permit type:	Purpos	se Permit		
1.2. Proponent det	ails			
Proponent's name:	BHP B	illiton Iron Ore Pty Ltd		
1.3. Property detai	ls			
Property:		re (McCamey's Monster) Ag	nent Act 1964, Mineral Lease 244SA (AML 70/244) greement Authorisation Act 1972, Mining Lease 266SA (AM	
Local Government Area:	Shire o	Shire of East Pilbara		
Colloquial name:	Wester	rn Ridge Exploration Drilling	J Project	
1.4. Application				
Clearing Area (ha) 300	No. Trees	Method of Clearing Mechanical Removal	For the purpose of: Mineral Exploration, Hydrogeological Investigations, Geotechnical Investigations and Associated Works	
1.5. Decision on a	pplication			
Decision on Permit Appli	cation: 18 Eeb	aruary 2016		

Decision on Permit Application:18 February 2016Decision Date:Grant

# 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:

18: Low woodland; mulga (Acacia aneura); and

82: Hummock grasslands, low tree steppe; snappy gum over Triodia wiseana (GIS Database).

A large-scale flora and vegetation survey was conducted over the original permit boundary and its surrounds in May and August 2010. A level 2 flora and vegetation survey was conducted over the additional areas during June 2014. A total of 28 vegetation associations from 12 broad floristic formations have been mapped within the permit area (BHP Billiton Iron Ore, 2014).

### Acacia Low Open Forest

1a: Low Open Forest (to Low Open Woodland) of Acacia aptaneura, Acacia pruinocarpa, Acacia ayersiana and Acacia catenulata subsp. occidentalis over Shrubland of Eremophila forrestii subsp. forrestii and Senna artemisioides subsp. oligophylla and Open Hummock Grassland of Triodia pungens forming groves on hardpan plains;

1b: Low Open Forest (to Low Woodland) of Acacia aptaneura, Acacia pruinocarpa and Eucalyptus xerothermica over Shrubland of Eremophila forrestii subsp. forrestii, Sida ectogama and Eremophila latrobei subsp. latrobei over Open Tussock Grassland of Themeda triandra, Aristida inaequiglumis and \*Cenchrus ciliaris on stony floodplains and unincised drainage zones;

1c: HS AcaAaAprSaEllAbTbrTw: Low Open Forest of Acacia catenulata subsp. occidentalis, Acacia aptaneura and Acacia pruinocarpa over Open Shrubland of Scaevola acacioides, Eremophila latrobei subsp. latrobei and Acacia bivenosa over Open Hummock Grassland of Triodia brizoides and Triodia wiseana on red brown clay loam on breakaways and steep hill slopes;

#### **Corymbia Low Woodland**

2: Low Woodland of *Corymbia hamersleyana, Eucalyptus xerothermica* and *Acacia aptaneura* over High Open Shrubland of *Petalostylis labicheoides, Acacia pyrifolia* subsp. *pyrifolia* and *Acacia maitlandii* over Open Tussock Grassland of *Eriachne tenuiculmis, Themeda triandra* and \**Cenchrus ciliaris* along medium drainage lines;

#### Acacia Low Open Woodland

3: Low Open Woodland of Acacia aptaneura over High Open Shrubland of Acacia tetragonophylla and Acacia synchronicia over Very Open Tussock Grassland of \*Cenchrus ciliaris, Aristida latifolia and Eriachne mucronata on

#### quartz plains;

#### Acacia Open Scrub

4: Open Scrub of *Acacia bivenosa* over Hummock Grassland of *Triodia angusta* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* on undulating ironstone and chert hills;

#### Acacia High Open Shrubland

5: High Open Shrubland of Acacia aptaneura, Acacia synchronicia and Acacia tetragonophylla over Low Open Shrubland of Eremophila cuneifolia, Solanum lasiophyllum and Maireana georgei over Very Open Bunch Grassland of Aristida contorta on stony chert ironstone plains and rises;

#### **Triodia Closed Hummock Grassland**

6: Closed Hummock Grassland of *Triodia brizoides* and *Triodia wiseana* with Shrubland of *Eremophila fraseri* and High Open Shrubland of *Acacia bivenosa* and *Acacia kempeana* on high dolerite hills;

#### **Triodia Hummock Grassland**

7a: Hummock Grassland of *Triodia wiseana* ± *Triodia brizoides* with Open Shrubland of *Acacia bivenosa* and *Acacia inaequilatera* and Low Open Shrubland of *Senna artemisioides* subsp. *oligophylla* on dolerite footslopes and undulating low hills;

7b: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia wiseana* and/or *Triodia brizoides* with Open Shrubland of *Acacia bivenosa*, *Acacia tenuissima* and *Senna glutinosa* subsp. *glutinosa* and Low Open Shrubland of *Eremophila canaliculata*, *Ptilotus obovatus* and *Acacia spondylophylla* on hill crests, steep scree slopes and banded iron formation (BIF) ridges;

7c: Hummock Grassland of *Triodia angusta* and *Triodia wiseana* with High Shrubland of *Acacia bivenosa*, *Acacia kempeana* and *Acacia sibirica* and Low Open Mallee of *Eucalyptus socialis* subsp. *eucentrica* or *Eucalyptus gamophylla* on calcrete, quartz and dolerite low hills, stony rises and stony plains;

7d: Hummock Grassland of *Triodia wiseana* and *Triodia angusta* with High Shrubland of *Acacia bivenosa*, *Acacia kempeana* and *Acacia sibirica* on quartz / dolerite mixed plains;

7e: Hummock Grassland of *Triodia longiceps* with Low Woodland of *Eucalyptus xerothermica* and *Acacia aptaneura* and High Open Shrubland of *Acacia aptaneura*, *Acacia sibirica* and *Acacia kempeana* on stony floodplains;

7f: Hummock Grassland of *Triodia pungens* with High Open Shrubland of *Acacia kempeana*, *Acacia sibirica* and *Acacia bivenosa* and Scattered Trees of *Corymbia hamersleyana* on dolerite derived sandy plains in broad valleys;

7g: Hummock Grassland of *Triodia pungens* with Open Scrub of *Acacia bivenosa* and *Acacia tenuissima* on minor drainage lines;

7h: HC TsTpEkEg: Hummock Grassland of *Triodia* sp. Shovelanna Hill and *Triodia pungens* with Very Open Mallee of *Eucalyptus kingsmillii* subsp. *kingsmillii* and *Eucalyptus gamophylla* on red sandy loam on hill slopes and hill crests;

7i: HS TwElChHcAanAbAa: Hummock Grassland of *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia hamersleyana* and *Hakea chordophylla* and Open Shrubland of *Acacia ancistrocarpa*, *Acacia bivenosa* and *Acacia aptaneura* on red sandy loam on hill slopes;

7j: SP TsAi: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with High Open Shrubland of *Acacia inaequilatera* on red brown loamy sand on hill slopes and stony plains;

7k: HS TsTpAaAprAciAaEllSgl: Hummock Grassland of *Triodia* sp. Shovelanna Hill and *Triodia pungens* with High Open Shrubland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acacia citrinoviridis* and Open Shrubland of *Acacia aptaneura*, *Eremophila latrobei* subsp. *latrobei*, *Senna glutinosa* subsp. x *luerssenii* on red loamy sand on upper hill slopes;

7I: ME TpTTIExAciChPIApyGr: Hummock Grassland of *Triodia pungens* and *Triodia longiceps* with Low Woodland of *Eucalyptus xerothermica, Acacia citrinoviridis* and *Corymbia hamersleyana* over High Shrubland of *Petalostylis labicheoides, Acacia pyrifolia* var. *pyrifolia* and *Gossypium robinsonii* on red brown clay loam on medium drainage lines and surrounding floodplains;

7m: SP TpTbEgPlAbAan: Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Open Mallee of *Eucalyptus gamophylla* and Shrubland of *Petalostylis labicheoides*, *Acacia bivenosa* and *Acacia ancistrocarpa* on red brown loamy sand on stony plains and footslopes;

#### **Triodia Open Hummock Grassland**

8a: Open Hummock Grassland of *Triodia brizoides* and *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and Open Shrubland of *Dodonaea pachyneura*, *Eremophila latrobei* subsp. *latrobei* and *Acacia bivenosa* on cliff faces;

8b: GG TpCfeFbAcaDpaAh: Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia ferriticola, Ficus brachypoda* and *Acacia catenulata* subsp. *occidentalis* over High Open Shrubland of *Dodonea pachyneura* and *Acacia hamersleyensis* on red sandy clay loam in gullies and on breakaways;

8c: HS TsTpTbAaAprAwAteEexEll: Open Hummock Grassland of Triodia sp. Shovelanna Hill, Triodia pungens and

	<i>Triodia basedowii</i> with Low Open Woodland of <i>Acacia aptaneura</i> , <i>Acacia pruinocarpa</i> and <i>Acacia wanyu</i> and Open Shrubland of <i>Acacia tetragonophylla</i> , <i>Eremophila exilifolia</i> and <i>Eremophila latrobei</i> subsp. <i>latrobei</i> on red sandy loam on hill slopes;
	Aristida Tussock Grassland
	10: Tussock Grassland of Aristida latifolia, Aristida jerichoensis var. subspinulifera and Eragrostis xerophila with High Open Shrubland of Acacia aptaneura, Acacia tetragonophylla and Acacia synchronicia and Low Open Shrubland of Sida fibulifera, Senna artemisioides subsp. oligophylla and Senna hamersleyensis on gilgai drainage flats and minor drainage lines;
	Acacia Low Woodland
	11: FP AcaAaExEffTp: Low Woodland of <i>Acacia catenulata</i> subsp. <i>occidentalis</i> , <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over Open Shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i> over Open Hummock Grassland of <i>Triodia pungens</i> on red sandy loam on floodplains;
	Acacia Shrubland
	12: MI AmoAanPIChEITtAin: Shrubland of Acacia monticola, Acacia ancistrocarpa and Petalostylis labicheoides with Scattered Low Trees of Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia over Open Tussock Grassland of Themeda triandra and Aristida inaequilatera on red loamy sand on minor drainage lines;
	Eucalyptus Woodland
	13: MA EcEvAciApyMgCcEaTt: Woodland of <i>Eucalyptus camaldulensis</i> subsp. refulgens and <i>Eucalyptus victrix</i> over High Open Shrubland of <i>Acacia citrinoviridis, Acacia pyrifolia</i> var. pyrifolia and <i>Melaleuca glomerata</i> over Tussock Grassland of * <i>Cenchrus ciliaris, Eulalia aurea</i> and <i>Themeda triandra</i> on brown clay loam on banks of major drainage lines.
	*indicates introduced species
Clearing Description	Western Ridge Exploration Drilling Project.
	BHP Billiton Iron Ore Pty Ltd (BHP Billiton Iron Ore) proposes to clear up to 300 hectares of native vegetation within a total boundary of approximately 4,432 hectares for the purposes of mineral exploration, hydrogeological investigations, geotechnical investigations and associated works. The application area is located immediately south-west of BHP Billiton Iron Ore's existing Mount Whaleback mining operations, approximately 8 kilometres south-west of Newman, in the Shire of East Pilbara.
Vegetation Condition	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);
	То
	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	CPS 5926/1 was granted by the Department of Mines and Petroleum on 1 May 2014 and authorised the clearing of 220 hectares within a boundary of approximately 3,660 hectares. CPS 5926/2 was granted on 4 December 2015, increasing the amount of clearing authorised to 300 hectares and increasing the permit boundary to approximately 4,379 hectares. The permit duration was also extended to 30 November 2024 and the final reporting date was changed to this date.
	BHP Billiton Iron Ore has applied to increase the permit boundary by 48 hectares to a total boundary of 4,432 hectares. The proposed clearing area will remain unchanged at 300 hectares.
	application against cleaning principles

# 3. Assessment of application against clearing principles

Comments

BHP Billiton Iron Ore has applied to increase the amount of clearing authorised by 48 hectares to a total boundary of 4,432 hectares for the purpose of accessing areas that have previously been covered by Programmes of Work under the *Mining Act 1978*.

The flora and vegetation survey of the additional area recorded a total of 8 vegetation associations (BHP Billiton, 2015; Onshore Environmental, 2014). The vegetation association '*Astrebla* Closed Tussosk Grassland' was identified as being closely affiliated with the 'West Angelas Cracking Clays' Priority Ecological Community (BHP Billiton Iron Ore, 2014). This vegetation association was excluded from the additional area with a 50 metre buffer and won't be impacted by the proposed clearing. Vegetation associations 4 and 10 appear to be poorly represented regionally and are considered to be of local interest (Onshore Environmental, 2014). BHP Billiton Iron Ore (2014) has indicated that disturbance within these associations will be minimised where practicable.

No species of Threatened Flora have been recorded within the additional area (BHP Billiton Iron Ore, 2014; GIS Database). Two Priority 3 flora species, *Calotis latiuscula* and *Indigo gilesii*, were recorded during the survey of the additional area (BHP Billiton, 2015). Another species of interest recorded was *Aristida* cf. *nitidula* 

which could not be matched to any specimens held at the Western Australian Herbarium (Onshore Environmental, 2014). Records of both of these species were excluded from the permit boundary with a ten metre buffer.

Ten introduced flora species have been recorded within the amendment application area: Acetosa vesicaria, Aerva javanica, Bidens bipinnata, Cenchrus ciliaris, Cenchrus setigar, Cucumis melo subsp. agrestis, Cynodon dactylon, Malvastrum americanum, Setaria verticillata and Vachellia famesiana. Five of these species are considered to have a high rating under the Environmental Weed Strategy for Western Australia: Ruby Dock (Acetosa vesicaria), Buffel Grass (Cenchrus ciliaris), Birdwood Grass (Cenchrus setigar), Kapok bush (Aerva javanica) and Mimosa bush (Vachellia famesiana).

There have been a number of fauna surveys conducted in the vicinity of the additional area. The following seven broad fauna habitats have been mapped within the additional area (BHP Billiton, 2015; Onshore Environmental, 2014):

- Gilgai (cracking clay);
- Drainage Area;
- Minor Drainage Line;
- Major Drainage Line;
- Mulga;
- Stony Plain; and
- Crest / Slope.

The drainage line habitat can have high vegetation density and often has deeper and richer soils than other habitats (BHP Billiton Iron Ore, 2014). There is only a small amount of this habitat within the additional area (Onshore Environmental, 2014). The other fauna habitats are common and widespread in the local region. The original permit boundary excluded all Gorge / Gully habitat with a 50 metre buffer. As part of this amendment the 50 buffer around the Gorge / Gully habitat in the central area of the permit boundary has been removed as activities are required in this area. The buffer area was ground truthed and the proposed clearing will not impact on any of the Gorge / Gully habitat directly (BHP Billiton Iron Ore, 2015).

Four conservation significant fauna species have been recorded within the additional area (BHP Billiton, 2015):

- Peregrine Falcon (Falco peregrinus Migratory)
- Rainbow Bee-eater (Merops ornatus Migratory)
- Western Pebble-mound Mouse (Pseudomys chapmani Priority 4)
- Ghost Bat (Macoderma gigas Vulnerable)

The proposed clearing is unlikely to significantly impact these species. Based on the habitats present, the additional areas are not likely to represent significant habitat for local fauna species.

There are a number of minor ephemeral drainage lines that pass through the additional area (GIS Database). Several of the vegetation associations are described as being associated with drainage lines (Onshore Environmental, 2014). The proposed clearing is spread over a large area (4,432 hectares) and is not expected to have a significant impact on watercourses in the local area. The land systems within the additional area are generally not prone to erosion (Van Vreeswyk et al., 2004).

A small part of the additional area is within the Newman Water Reserve (GIS Database). Previous advice from the Department of Water is that the clearing activities at Western Ridge are unlikely to have a significant impact on the quality or quantity of groundwater.

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

Methodology BHP Billiton Iron Ore (2015) Onshore Environmental (2014) Van Vreeswyk et al. (2004)

GIS Database:

- Evaporation Isopleths
- Hydrographic Catchments Catchments
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- Threatened and Priority Flora

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

Comments

There is one Native Title Claim (WC2005/06) over the area under application (DAA, 2016). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act* 1993 and the nature of the act

(i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are several registered Aboriginal Sites of Significance in the vicinity of the application area (GIS Database). 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.

The clearing permit application was advertised on 11 January 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology DAA (2016) GIS Database:

- Aboriginal Sites of Significance

# 4. References

BHP Billiton Iron Ore (2015) Supporting information for amendment application CPS 5926/3, BHP Billiton Iron Ore Pty Ltd, Western Australia, December 2015.

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

Onshore Environmental (2014) Western Ridge Biological Survey. Unpublished Report Prepared for BHP Billiton Iron Ore Pty Ltd, dated September 2014.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) Technical Bulletin - An Inventory and Condition Survey of the Pilbara Region, Western Australia, No. 92. Department of Agriculture, Government of Western Australia, Perth, Western Australia.

# 5. Glossary

## Acronyms:

ВоМ	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 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.