

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details

Permit application No.: 7177/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: HBJ Minerals Pty Ltd

1.3. Property details

Property: Mining Lease 15/1272

Mining Lease 15/26

Prospecting Licence 15/4851 Miscellaneous Licence 15/356

Local Government Area Shire of Ashburton
Colloquial name: Gunga Prospect

1.4. Application

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

Mechanical Removal Mineral Production, Mineral Exploration, and Associated

Infrastructure

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 6 October 2016

## 2. Background

### 2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

#### **Vegetation Description**

Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation association is located within the application area (GIS Database):

9: Medium woodland; coral gum (Eucalyptus torquata) and goldfields blackbutt (E. lesoufii).

A flora and vegetation survey of the application area undertaken by Botanica Consulting in May of 2016 identified six broad vegetation communities (Botanica, 2016):

RH-AFW1 Low woodland of *Acacia quadrimarginea* over scrub of *Acacia* sp. narrow phyllode and low scrub of *Dodonaea lobulatal Senna artemisioides* subsp. *filifolia/Ptilotus obovatus* on rocky hillslope.

RH-EW1 Low woodland of *Eucalyptus torquata* over low shrub of *Dodonaea stenozyga* and dwarf scrub of *Acacia erinaceal Scaevola spinescensl Westringia rigida* on rocky hillslope.

SLP-EW1 Low woodland of *Eucalyptus salmonophloialE. clelandii* over low scrub of *Eremophila interstans/ Santalum acuminatum/Atriplex nummularia* and dwarf scrub of *Atriplex vesicaria* on sand-loam plain.

SLP-EW2 Low woodland of *Eucalyptus ravida* over low scrub of *Eremophila dempsteri* over dwarf shrub of *Acacia* erinacea on sand-loam plain

SLP/LS-EW1 Low woodland of *Eucalyptus salmonophloialE. griffithsii /E. ravida* over open scrub of *Eremophila scoparia* and *Atriplex nummularia* over dwarf scrub of *Atriplex vesicaria* on sand-loam plain/ low slope.

SLP/LS-EW2 Low woodland of Eucalyptus clelandii over open scrub of Exocarpos aphyllus/Eremophila oldfieldii subsp. oldfieldii and open dwarf scrub of Acacia erinacea/ Scaevola spinescens on sand-loam plain/ low slope.

A portion of the application area has been previously cleared by historic mining activities and is considered to be completely degraded (Botanica Consulting, 2016).

## Clearing Description

Gunga Prospect

HBJ Minerals Pty Ltd proposes to clear up to 50 hectares of native vegetation within a total boundary of approximately 150.5 hectares, for the purpose of mineral production, mineral exploration, and associated infrastructure. The project is located approximately five kilometres northeast of Coolgardie, in the Shire of Coolgardie.

**Vegetation Condition** 

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

То

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

Comment

The vegetation condition within the application area was determined during a flora and vegetation survey undertaken by Botanica (2016).

## 3. Assessment of application against Clearing Principles

## (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

## Comments Proposal not likely to be at variance to this Principle

The application area is located within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The vegetation is broadly described as Mallee's, Acacia thickets and shrubheaths on sandplains (CALM, 2002). Diverse Eucalyptus woodlands occur around salt lakes, on ranges, and in valleys and have been identified as having high species and ecosystem diversity (CALM, 2002).

A flora and vegetation survey was undertaken over the entire application area by Botanica Consulting in May of 2016 (Botanica, 2016). A total of 19 families, 28 genera and 64 taxa were identified (Botanica, 2016). No Threatened or Priority flora were recorded during the survey (Botanica, 2016). No Priority Ecological Communities (PECs) or Threatened Ecological Communities (TECs) are known to occur within the area and none were identified during the flora and vegetation survey (Botanica, 2016; GIS Database).

Six broad vegetation associations were identified within the application area, as described in the vegetation description above (Botanica, 2016). The vegetation associations identified within the application area are considered to be well represented in the surrounding area and are unlikely to act as significant habitat for fauna in the region (Botanica, 2016). A few hollow bearing trees that may act as habitat exist within the application area but given abundance of hollow bearing trees in the surrounding area a significant impact to fauna is unlikely (Botanica, 2016). The area has been disturbed to varying degrees by historical mining activity and drilling programs and a proportion of the application area (14%) is cleared vegetation (Botanica, 2016).

One introduced species, *Nicotiana glauca*, was recorded during the flora and vegetation survey (Botanica, 2016). Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

#### methodology

Botanica (2016) CALM (2002)

GIS Database:

- IBRA Australia
- 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 fauna survey was undertaken over the application area by Bamford Consulting Ecologists in May of 2016 (Bamford, 2016). A total of 48 fauna species were recorded during the field survey, comprising two reptile, 38 bird, four native mammal and four introduced mammal species (Bamford, 2016). Based on available habitat, the application area is considered likely to support 11 vertebrate species of conservation significance (Bamford, 2016):

- Malleefowl (Leipoa ocellata) VU under the EPBC Act
- Peregrine Falcon (Falco pererginus) OS under the WC Act
- Rainbow Bee-eater (Merops ornatus) IA under the EPBC Act
- Central Long-eared Bat (Nyctophilus major tor) Priority 4 as listed by DPaW
- Several locally significant birds Rufous Treecreeper (Climacteris rufus), Gilbert's Whistler (Pachycephala inomata), Western Crested Shrike-Tit (Falcunculus frontatus), Scarlet-chested Parrot (Neophema splendida), Regent Parrot (Polytelis anthopeplus), Southern Scrub-robin (Drymodes brunneopygia), Purple-gaped Honeyeater (Lichenostomus cratitius)

The Rainbow bee-eater and Peregrine Falcon are both wide ranging species and are not confined to a specific habitat (Bamford, 2016; DEHP, 2016). Given their large ranges significant impacts to these species as a result of the proposed clearing are considered unlikely.

Some habitat suitable for the Central Long-eared Bat and the locally significant bird species listed above will be impacted by the proposed clearing. However, given the suitable habitat that exists in the surrounding area, impacts to these species are considered to be minor to negligible (Bamford, 2016; GIS Database). HBJ Minerals Pty Ltd maintains an internal commitment to conserving hollow bearing trees where possible (Bamford, 2016; HBJ Minerals, 2016).

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

Three conservation significant invertebrate species have been recorded in the Coolgardie - Kalgoorlie area (Bamford, 2016). These are the Arid Bronze Azure Butterfly (Ogyris subterrestris petrina), Inland Hairstreak Butterfly (Jalmenus aridus) and the freshwater shrimp (Branchinella denticulata). Due to a lack of suitable habitat, these species are not expected to occur within the application area (Bamford, 2016).

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

#### Methodolgy

Bamford (2016) **DEHP** (2016)

DPaW (2012) HBJ Minerals (2016)

GIS Database:

### - Imagery

## (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

According to available databases, there are no records of Threatened Flora within the application area (GIS Database). No Threatened flora was recorded during a flora and vegetation survey of the application area (Botanica, 2016).

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

## Methodology

Botanica (2016)

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 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 (Botanica, 2016).

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

#### Methodology

Botanica (2016)

GIS Database:

- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

## Officer

Lauren Stirbinskis

## (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 97.96% of pre-European vegetation remains (GIS Database; Government of Western Australia, 2015).

The vegetation within the application area has been mapped as Beard vegetation association 9 (GIS Database). Beard vegetation association 9 is well represented at both a state and bioregional level, as shown in the table below (Government of Western Australia, 2015). Given the amount of vegetation remaining in the local area and bioregion, the vegetation proposed to be cleared is not considered to represent a remnant within an extensively cleared area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Lands
IBRA Bioregion - Coolgardie	12,912,204.39	12,648,491.45	97.96	Least Concern	~ 16.39
Beard vegetation associations - State					
9	240,509.33	235,161.94	97.78	Least Concern	~ 8.07
Beard vegetation associations - Bioregion					
9	240,441.99	275,589.11	98.34	Least Concern	~ 7.97

<sup>\*</sup> Government of Western Australia (2015)

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

#### Methodology

Department of Natural Resources and Environment (2002)

Government of Western Australia (2015)

GIS Database:

- IBRA Australia
- Pre-European Vegetation

## (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

## Comments Proposal is not likely to be at variance to this Principle

According to available databases, there are no permanent or ephemeral wetlands within the application area (GIS Database). There are four minor non-perennial drainage lines that run through the application area. From aerial imagery it appears that riparian vegetation is unlikely to be growing in association with these drainage lines. No riparian vegetation was identified during a flora and vegetation survey over the application area (Bamford, 2016)

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

## Methodology Bamford (2016)

GIS Database:

- Hydrography, linear
- Imagery

# (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

## Comments Proposal may be at variance to this Principle

According to available databases, the soil type within the application area is described as rocky ranges and hills of greenstones - basic igneous rocks: chief soils seem to be shallow calcareous loamy soils (GIS Database). Based on previous soil surveys undertaken across the application area, erosion and weathering processes have occurred which have stripped away the original soil profile and replaced it with low energy alluvial material (Goldfields Mining Services, 2012). Other areas consist of partially weathered rock and virtually no soil. Based on the above there is potential for erosion to occur, particularly within drainage areas (Goldfields Mining Services, 2012). Potential impacts from erosion as a result of the proposed clearing may be minimised

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

by the implementation of a staged clearing condition.

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

## Methodology Goldfields Mining Services (2012)

GIS Database:

- Soils, Statewide

## (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 conservation area is the Kangaroo Hills Timber Reserve, located approximately 8.5 kilometres south west of the application area (GIS Database). Based on the distance between the application area and the timber reserve, the proposed clearing is not likely to impact the environmental values of any conservation area.

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

#### Methodology GIS Database:

- DPaW Tenure

## (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). There are no permanent watercourses within the application area, however, there are four minor non perennial drainage lines (GIS Database). These drainage lines converge on the eastern boundary of the application area and drain in a south easterly direction to Lake Brown, located approximately 5 kilometres south east of the application area (GIS Database).

The annual average rainfall for Coolgardie is 270.7 millimetres and the average annual evaporation rate for the application area is between 2,600 and 2,800 millimetres (BoM, 2016). Based on this, surface water is likely to evaporate quickly with surface sheet flow and higher sediment levels generally occurring during larger rainfall events. Therefore, during normal rainfall events, the proposed clearing would not likely lead to an increase in sedimentation of watercourses within the application area.

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 amount of clearing proposed (50 hectares) is unlikely to alter existing groundwater quality.

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 is located within the Lake Lefroy catchment area (GIS Database). Given the size of the area to be cleared (50 hectares) in relation to the size of the catchment area (2,488,206 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.

With an average annual rainfall of 270.7 millimetres and an average evaporation rate of between 2,600 and 2,800 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2016). Given the likelihood of little surface flow, the proposed clearing is not likely to cause or 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 1 August 2016 and 19 September 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology DAA (2016)

## 4. Assessor's recommendations

#### Comment / recommendation

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

### 5. References

- Bamford (2016) Metals X Gunga West Project 2016 Fauna Assessment. Report prepared for HBJ Minerals Pty Ltd, by Bamford Consulting Ecologists, May 2016.
- Botanica Consulting (2016) Level 1 Flora and Vegetation Survey of the Gunga Prospect. Report prepared for HBJ Minerals Pty Ltd, by Botanica Consulting, June 2016.
- BoM (2016) Climate Statistics for Australian Locations, Coolgardie. Bureau of Meteorology. http://www.bom.gov.au (Accessed 21 September 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed 21 September 2016).
- DEHP (2016) Peregrine Falcon. Department of Heritage Protection Queensland. https://www.ehp.qld.gov.au (Accessed 21 September 2016)
- DPaW (2012) Fauna Profiles Malleefowl. Department of Parks and Wildlife. https://www.dpaw.wa.gov.au (Accessed 21 September 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
- Goldfields Mining Services (2012) Memo regarding Gunga West Soils. Memo from Goldfields Mining Services to Blue Tiger Mines Pty Ltd, September 2012.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, Perth.
- HBJ Minerals (2016) Additional Information received in relation to clearing permit CPS 7177/1. HBJ Minerals Pty Ltd, September 2016.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

## 6. Glossary

## **Acronyms:**

BoM Bureau of Meteorology, Australian Government

DAA Department of Aboriginal Affairs, Western Australia

DAFWA Department of Agriculture and Food, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DPaW and DER)

DER Department of Environment Regulation, Western Australia

DMP Department of Mines and Petroleum, Western Australia

**DRF** Declared Rare Flora

**DotE** Department of the Environment, Australian Government

**DoW** Department of Water, Western Australia

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

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

EPA Environmental Protection Authority, Western Australia
EP Act Environmental Protection Act 1986, Western Australia

EPBC Act Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)

GIS Geographical Information System
ha Hectare (10,000 square metres)

IBRA Interim Biogeographic Regionalisation for Australia

IUCN International Union for the Conservation of Nature and Natural Resources – commonly known as the

World Conservation Union

PEC Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Ecological Community

#### **Definitions:**

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

#### T Threatened species:

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

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

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

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

## CR Critically endangered species

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### EN Endangered species

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

## VU Vulnerable species

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

#### EX Presumed extinct species

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

#### IA Migratory birds protected under an international agreement

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### CD Conservation dependent fauna

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

## OS Other specially protected fauna

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

## P Priority species

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

## P1 Priority One - Poorly-known species:

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

### P2 Priority Two - Poorly-known species:

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

### P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

## P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

## Principles for clearing native vegetation: (a) Native vegetation should not be cleared if it comprises a high level of biological diversity. (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for th maintenance of, a significant habitat for fauna indigenous to Western Australia. Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rar (c) (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. Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that (e) 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. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable lan (g) 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. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in th (i)

(j)