



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7260/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **BHP Billiton Iron Ore Pty Ltd**

### 1.3. Property details

Property: *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972, Mining Lease 266SA (AM 70/266)*  
Local Government Area: Shire of East Pilbara  
Colloquial name: South Jimblebar Exploration Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Mechanical Removal	Mineral Exploration, Geotechnical and Hydrogeological Investigations and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 27 October 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. Three Beard vegetation associations have been mapped within the application area (GIS Database):

**29:** Sparse low woodland; mulga, discontinuous in scattered groups;

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

**216:** Low woodland; mulga (with spinifex) on rises.

Onshore (2014) described 16 vegetation associations within seven broad floristic communities over the application area:

#### **Acacia High Open Shrubland**

FPApaAaEfrTstP: High Open Shrubland of *Acacia paraneura* and *Acacia aptaneura* over Open Shrubland of *Eremophila fraseri* over Very Open Hummock Grassland of *Triodia* sp. Shovelanna Hill and *Triodia pungens* on red clay loam on floodplains and stony plains;

#### **Acacia Low Woodland**

FPAAAprAcaEffDpeSeAcoDamAin: Low Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acacia catenulata* subsp. *occidentalis* over Open Shrubland of *Eremophila forrestii* subsp. *forrestii*, *Dodonaea petiolaris* and *Sida ectogama* over Open Tussock Grassland of *Aristida contorta*, *Digitaria ammophila* and *Aristida inaequiglumis* on red orange clay loam on floodplains;

#### **Corymbia Low Open Woodland**

SACAprGsGstApaAanTbTsc: Low Open Woodland of *Corymbia hamersleyana*, *Acacia pruinocarpa* and *Grevillea striata* over High Open Shrubland of *Grevillea stenobotrya*, *Acacia pachyacra* and *Acacia ancistrocarpa* over Very Open Hummock Grassland of *Triodia basedowii* and *Triodia schinzii* on red sandy loam on sand plains;

#### **Eucalyptus Woodland**

MAEcEvAciApyMgCcEaTt: Woodland of *Eucalyptus camaldulensis* subsp. *refulgens* and *Eucalyptus victrix* over High Open Shrubland of *Acacia citrinoviridis*, *Acacia pyrifolia* var. *pyrifolia* and *Melaleuca glomerata* over Tussock Grassland of *Cenchrus ciliaris*, *Eulalia aurea* and *Themeda triandra* on brown clay loam on banks of major drainage lines;

#### **Senna Low Open Shrubland**

SASahCpElah;AmcAcoPclEar: Low Open Shrubland of *Senna artemisioides* subsp. *helmsii*, *Chrysocephalum pterochaetum* and *Eremophila lanceolata* with Scattered Tall Shrubs of *Hakea lorea* var. *lorea* and *Acacia macraneura* over Scattered Tussock Grasses of *Aristida contorta*, *Paspalidium clementii* and *Eriachne aristidea* on red brown sandy loam on sandy plains and floodplains;

#### **Triodia Hummock Grassland**

FPTbAaAprEff: Hummock Grassland of *Triodia basedowii* with Low Open Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Eremophila forrestii* subsp. *forrestii* on red sandy loam on floodplains;

HSTsTpAaAprAciAaEIIISgl: 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;

HSTsTwTpEICHAhAad: Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia wiseana* and *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over Low Open Shrubland of *Acacia hilliana* and *Acacia adoxa* var. *adoxo* on red brown sandy loam on hill slopes;

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

HSTbTsAsyAaAte: Open Hummock Grassland of *Triodia basedowii* and *Triodia* sp. Shovelanna Hill with Open Shrubland of *Acacia synchronicia*, *Acacia aptaneura* and *Acacia tetragonophylla* over Low Open Shrubland of *Eremophila cuneifolia*, *Maireana georgei* and *Solanum lasiophyllum* on red sandy loam on floodplains and lower hill slopes;

HSTsTpTb: Open Hummock Grassland of *Triodia* sp. Shovelanna Hill, *Triodia pungens* and *Triodia basedowii* with Low Open Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acacia wanyu* and Open Shrubland of *Acacia tetragonophylla*, *Eremophila exilifolia* and *Eremophila latrobei* subsp. *latrobei* on red sandy loam on hill slopes; and

SATIAanApaAprCh: Open Hummock Grassland of *Triodia lanigera* with Open Shrubland of *Acacia ancistrocarpa* and *Acacia pachyacra* and Scattered Low Trees of *Acacia paraneura*, *Acacia pruinocarpa* and *Corymbia hamersleyana* on red sandy loam on stony plains.

<b>Clearing Description</b>	South Jimblebar Exploration Project. BHP Billiton Iron Ore Pty Ltd (BHP Billiton) has applied to clear up to 200 hectares of native vegetation, within a total boundary of approximately 1975.4 hectares, for the purpose of mineral exploration, geotechnical and hydrogeological investigations and supporting infrastructure. The proposed clearing is located approximately 23 kilometres east of Newman, in the Shire of East Pilbara.
<b>Vegetation Condition</b>	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);  to  Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
<b>Comment</b>	The vegetation condition was derived from a vegetation survey conducted by Onshore Environmental (2014).

### **3. Assessment of application against clearing principles**

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

<b>Comments</b>	<p><b>Proposal is not likely to be at variance to this Principle</b></p> <p>A survey of the application area identified 16 different vegetation associations (Onshore Environmental, 2014). The vegetation condition ranged from excellent to degraded with the majority of the application area in very good condition (Onshore Environmental, 2014). None of the vegetation associations within the application area have been identified as being a Threatened or Priority Ecological Community (Onshore Environmental, 2014; GIS Database).</p> <p>No species of Threatened or Priority flora have been recorded within the application area (Onshore Environmental, 2014). The flora survey recorded four species of Priority flora; <i>Aristida jerichoensis</i> var. <i>subspinulifera</i> (Priority 3), <i>Euphorbia inappendiculata</i> var. <i>inappendiculata</i> (Priority 2), <i>Goodenia nuda</i> (Priority 4) and <i>Vittadinia</i> sp. Coondewanna Flats (Priority 1) in areas adjacent to the application area. These locations were removed from the application with a 10 metre buffer (BHP Billiton, 2016). The same approach was also taken for five flora species recorded from the survey that were considered to have a significant range extension (BHP Billiton, 2016). The proposed clearing of 200 hectares within a larger area of approximately 1,975 hectares is not likely to have a significant impact on habitat for these species.</p> <p>Six weed species were identified within the application area (BHP Billiton, 2016). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p> <p>There has been four broad fauna habitats identified across the application area (Biologic, 2014). The habitats are well represented in the local region and the diversity of habitats is similar to those of the surrounding areas. There has been three species of conservation significance recorded within the application area (Biologic, 2014). Given the habitats and habitat features present within the application area, it is not likely to support a higher level of faunal diversity than surrounding areas.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
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**Methodology** BHP Billiton (2016)  
Biologic (2014)  
Onshore Environmental (2014)

GIS Database:  
- Threatened and Priority Flora  
- 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 is not likely to be at variance to this Principle**

There are four broad fauna habitats identified within the application area (BHP Billiton, 2016):

- Drainage area;
- Mulga Woodland;
- Sand plain;
- Crest / slope.

The mulga woodland habitat is largely associated with drainage lines and is likely to be the most significant habitat as it has the potential to provide a range of microhabitats including logs, leaf litter and sandy soils for burrowing (GIS Database). The sand plain habitat covers the greatest proportion of the application area (BHP Billiton, 2016).

There has been three species of conservation significance recorded within the application area; Brush-tailed Mulgara (*Dasyercus blythi* – Priority 4), Rainbow Bee-eater (*Merops ornatus* – Migratory) and Spotted Ctenotus (*Ctenotus uber* subsp. *johnstonei* – Priority 2) (BHP Billiton, 2016). The Western Pebble-mound Mouse is also considered likely to be present within the application area (*Pseudomys chapmani* – Priority 4).

The Brush-tailed Mulgara was identified from scats, tracks and active burrows. These records were from the sand plains habitat. The active burrows were excluded from the application area with a 10 metre buffer. The sand plains habitat is common in the surrounding local area. The Spotted Ctenotus is relatively common within the mulga woodland and sand plain habitat (BHP Billiton, 2016). The Rainbow Bee-eater is likely to forage across all habitats in the area. Preferred habitat for the Western Pebble-mound Mouse is the crest / slope habitat.

The habitats within the application area are widespread and contiguous with the surrounding areas. The proposed clearing of 200 hectares within a larger permit area of approximately 1,975 hectares is not likely to have a significant impact on fauna in the local area.

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

**Methodology** BHP Billiton (2016)  
Biologic (2014)

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 is not likely to be at variance to this Principle**

According to available databases, there are no records of any Threatened flora within the application area (GIS Database). The flora survey over the application area did not record any Threatened flora species within the application area (Onshore Environmental, 2014).

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

**Methodology** Onshore Environmental (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**

According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The vegetation survey did not identify any vegetation communities considered to be a TEC within the application area (Onshore Environmental, 2014).

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

**Methodology** Onshore Environmental (2014)

GIS Database:  
- Threatened and Priority Ecological Communities

**(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 lies within the Pilbara Interim Biogeographical Regionalisation of Australia (IBRA) bioregion in which approximately 99.58% of the pre-European vegetation remains (Government of Western Australia, 2015; GIS Database).

The vegetation of the application area has been broadly mapped as Beard vegetation associations 29, 82, 216 (GIS Database). These vegetation associations have not been extensively cleared as over 99% remains at both a state and bioregional level (Government of Western Australia, 2015). The application area is not a remnant nor does it form part of any remnants within the local area (GIS Database).

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

**Methodology** Government of Western Australia (2015)

GIS Database:  
- IBRA WA (Regions - Sub Regions)  
- Imagery  
- Pre-European Vegetation

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

**Comments Proposal is at variance to this Principle**

There are no permanent watercourses within the application area, however, there are a number of ephemeral drainage lines within the application area (GIS Database). The vegetation association MAEcEvAciApyMgCcEaTt was described as occurring on the banks of major drainage lines (Onshore Environmental, 2014). This vegetation association is only within a small slither in the south-west corner of the application area (BHP Billiton, 2016). This vegetation is associated with Shovelanna Creek, however, the proposed clearing is not likely to impact on this watercourse. Vegetation association FPTbAaAprEff was also described as occurring on floodplains and is growing in association with several watercourses in the application area (Onshore Environmental, 2014; GIS Database). Potential impacts to watercourses may be minimised by the implementation of a watercourse management condition.

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

**Methodology** BHP Billiton (2016)  
Onshore Environmental (2014)

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 is not likely to be at variance to this Principle**

The application area has been mapped as comprising the Cadgie, Divide, Jamindie, Newman, Sylvania and Washplain land systems (GIS Database). The majority of these land systems are generally not prone to erosion, however, within the Sylvania land system drainage floors, some saline plains and sandy plains have slight to moderate susceptibility to erosion (Van Vreeswyk et al., 2004). Within the Jamindie land system, drainage tracts are also moderately susceptible to erosion (Van Vreeswyk et al., 2004). These two land systems make up the majority of the application area.

There are some areas of drainage within the application area which may be more susceptible to erosion than other surrounding areas. The proposed clearing is likely to be spread over the 1,975 hectare application area and not concentrated in one area. Potential impacts of erosion within drainage areas may be minimised by the implementation of a watercourse management condition.

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

**Methodology** Van Vreeswyk et al. (1994)

GIS Database:  
- Landsystem Rangelands

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

**Comments Proposal is not at variance to this Principle**

The closest conservation area to the application area is the DPaW managed former Roy Hill pastoral lease which is located approximately 85 kilometres north, north-west of the application area. The proposed clearing will not impact on any ecological linkages to this conservation area (GIS Database). Given the distance to the nearest conservation area, the proposed clearing is not likely to impact on its environmental values.

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

**Methodology** GIS Database:  
- DPaW Tenure  
- Imagery

**(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**

There are no permanent watercourses within the application area (GIS Database). There are several non-perennial watercourses located within the application area (GIS Database). These watercourses are only likely to flow following large rainfall events. Potential impacts to surface water quality may be minimised by the implementation of a watercourse management condition.

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The groundwater in the application area is considered to be marginal ranging from 500 to 1,000 milligrams/litre total dissolved solids (GIS Database). The proposed clearing is not expected to have any impact on the quality of groundwater in the local area.

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

**Methodology** GIS Database:  
- Groundwater Salinity, Satewide  
- Hydrography, linear  
- Public Drinking Water Source Areas (PDWSAs)

**(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**

With an average annual rainfall of 330.1 millimetres and an average annual evaporation rate of 3,200 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)

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

**Comments**

There is one native title claim over the application area (WC2005/006) (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 19 September 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

## 4. References

- BHP Billiton (2016) South Jimblebar Native Vegetation Clearing Permit Application Supporting Document for Exploration Drilling.
- Biologic (2014) Consolidation of regional Fauna Habitat Mapping BHP Billiton Iron Ore Pilbara Tenure. Report prepared for BHP Billiton Iron Ore Pty Ltd
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 25 October 2016).
- 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.
- 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) Consolidation of Regional Vegetation Mapping BHP Billiton Iron Ore Pilbara Tenure. Report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental, June 2014.
- Van Vreeswyk, A.M.E.; Payne, A.L.; Leighton, K.A.; Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia, Technical Bulletin No. 92 Department of Agriculture Western Australia, South Perth.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DEE</b>	Department of the Environment and Energy, Australian Government
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DoE</b>	Department of the Environment, Australian Government (now DEE)
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	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.