

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit applicat	ion details				
Permit application No.:	8234/1 Purpose Permit				
4.0 Dremenset dete					
1.2. Proponent deta Proponent's name:	Galena Mining Limited				
1.3. Property details	5				
Property:	General Purpose Lease 52/292 Mining Lease 52/776 Miscellaneous Licence 52/194				
Local Government Area: Colloquial name:	Shire of Meekatharra Abra Base Metals Project				
<b>1.4. Application</b> <b>Clearing Area (ha)</b> 128.373	No. TreesMethod of ClearingFor the purpose of:Mechanical RemovalMineral Production				
1.5. Decision on ap	plication				
Decision on Permit Applica Decision Date:	ation: Grant 20 December 2018				
2. Site Information					
2.1. Existing enviro	nment and information				
2.1.1. Description of th	e native vegetation under application				
Vegetation Description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 18: Low woodland; mulga ( <i>Acacia aneura</i> ); and 39: Shrublands; mulga scrub (GIS Database).				
	A flora and vegetation survey was conducted over the application area by Stantec during April 2018. The following vegetation associations were recorded within the application area (Stantec, 2018):				
	<ul> <li>AcAcPISspScHs: Acacia citrinoviridis (Grevillea berryana) low woodland over Acacia citrinoviridis and Psydrax latifolia (Acacia aneura and Acacia ?ramulosa var. ramulosa) tall shrubland over Sida ?sp. spiciform panicles (E. Leyland 14/08/90), Senna cuthbertsonii and Hibiscus sturtii var. forrestii open shrubland to shrubland.</li> </ul>				
	<b>GbArrAiEf</b> : Grevillea berryana open low woodland over Acacia ?ramulosa var. ramulosa and Acacia incurvaneura tall shrubland to open scrub over Eremophila forrestii subsp. ?forrestii open low shrubland.				
	<ul> <li>GbArrExEjjEm: Grevillea berryana open low woodland over Acacia ?ramulosa hybrid open shrubland to tall open shrubland over Eremophila exilifolia and Eremophila jucunda subsp. jucunda over Eriachne mucronata very open tussock grassland to open tussock grassland.</li> </ul>				
	<ul> <li>Mosaic of GbArrAiEf/GbArrExEjjEm: Grevillea berryana open low woodland over Acacia ?ramulosa var. ramulosa and Acacia incurvaneura tall shrubland to open scrub over Eremophila forrestii subsp. ?forrestii open low shrubland / Grevillea berryana open low woodland over Acacia ?ramulosa hybrid open shrubland to tall open shrubland over Eremophila exilifolia and Eremophila jucunda subsp. jucunda low shrubanld over Eriachne mucronata very open tussock grassland to open tussock grassland.</li> </ul>				
Clearing Description	Abra Base Metals Project. Galena Mining Limited proposes to clear up to 128.373 hectares of native vegetation within a boundary of approximately 784.35 hectares, for the purpose of mineral production. The project is located approximately 180 kilometres southwest of Newman, within the Shire of Meekatharra.				
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).				
	То				
	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).				

The vegetation condition was derived from a vegetation survey conducted by Stantec during 26 to 30 April 2018 (2018). Majority of the vegetation condition was matted to be in Very Good condition. Vegetation considered to be Degraded include the areas previously cleared for exploration activities (Stantec, 2018).

Approximately 46 hectares of this application area was not within the scope of the survey (GIS Database). However, based on aerial imagery and vegetation mapping, this additional area is not likely to represent any new vegetation associations or fauna habitats that are different to the surveyed area (GIS Database).

The proposed clearing is to develop an underground lead mining operation in the Gascoyne region. The project will consist of an ore processing plant, tailings storage facility and supporting infrastructure.

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

The clearing permit application area is located within the Augustus subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Gascoyne Bioregion (GIS Database). The Augustus subregion is characterised by rugged low sedimentary and granite ranges divided by broad flat valleys (CALM, 2002). Mulga woodland over *Triodia* species occurs on shallow stony loams on rises, while the shallow earthy loams over hardpan on the plains support open Mulga woodland. The dominant land-use of the subregion is grazing (CALM, 2002).

A detailed flora and vegetation survey was undertaken between 26 and 30 April 2018 (Stantec, 2018). Eight vegetation associations were recorded during the survey, however only four of these are located within the application area (Stantec, 2018; GIS Database). None of these vegetation associations are considered to be analogous to any Threatened or Priority Ecological Communities in the region. The desktop assessment identified a total of 177 flora taxa from 42 families and 108 genera, as potentially occurring within the application area, of which 22 are species of conservation significance. One Threatened flora species *Pityrodia augustensis* was identified during the desktop assessment, however it is unlikely to occur within the application area due to the lack of a suitable habitat (Stantec, 2018). The closest record of *Pityrodia augustensis* is over 150 kilometres west of the application area (Western Australian Herbarium, 2018). Following the vegetation survey, only four Priority flora species, *Eremophila arguta* (P1), *Ptilotus ectinocladus* (P1), *Eremophila coacta* (P3) and *Eremophila rigida* (P3) were considered to possibly occur within the application area based on the habitat types recorded (Stantec, 2018).

The field survey recorded 101 vascular flora species representing 25 families and 58 genera. No Threatened or Priority flora species were recorded during the survey. All four Priority species identified as possibly occurring within the application area are perennial species that if they were present within the application area, it is unlikely that they would have gone unnoticed at the time of the survey (Stantec, 2018). One potential range extension species was recorded. *Centipeda minima* subsp. *macrocephala* was recorded outside its normal range, growing in association with 5 Mile Creek (Stantec, 2018). However this species will not be impacted as it is located outside of the application area (GIS Database).

Two weed species, *Bidens bipinnata* (Bipinnate Beggartick) and *Malvastrum amercanum* (Spiked Malvastrum), were recorded from within the application area. These weeds were growing in association with 5 Mile Creek and other smaller incised drainage lines. These areas are not found within the application area. Care must be taken to ensure that the proposed clearing activities do not spread or introduce weed species to non-infested areas. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Four broad fauna habitat types were recorded from within the application area. These habitats are widespread in the surrounding regions, and are considered to be of limited significance to fauna (Stantec, 2018). It is unlikely that the fauna habitat types within the application area support a higher level of biodiversity than the surrounding area.

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

#### Methodology CALM (2002)

Stantec (2018) Western Australian Herbarium (2018)

GIS Database:

- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened Fauna

# (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

The following three fauna habitat types were recorded within the application area:

- Banded Mulga on Plain;
- Open Shrubland on Stony Plain; and
- Drainage.

The taller trees and areas of dense mulga within these fauna habitat types provide potential roosting and nesting habitat for avian species and shelter for fauna. The Drainage and Banded Mulga on Plain fauna habitat types contain varying degrees of woody debris, leaf litter, and small clay crevices within the Drainage habitat, which may provide some shelter to small reptiles and mammals (Stantec, 2018). The Drainage fauna habitat type contained the most variation in structure, offering the most complex fauna habitats. The Drainage areas are also subject to inundation during significant rainfall events, which may support wetland birds and amphibians. The Open Shrubland on Stony Plain is not likely to provide critical habitat for fauna owing to the open vegetation and lack of debris, litter, crevices and hollows (Stantec, 2018).

Two additional fauna habitats categorised as 'Gully' and 'Riparian' were recorded during the field survey (Stantec, 2018). However, these two additional fauna habitat types are located outside of the application area and therefore, will not be directly impacted by the proposed clearing (GIS Database). The Riparian fauna habitat type was the only fauna habitat type recorded in the survey to be considered significant due to the potential foraging suitability for the Peregrine Falcon (*Falco peregrinus*; Schedule 7).

A level 1 fauna survey was conducted between 26 and 30 April 2018 with additional fauna observations made between 28 May to 1 June 2018 (Stantec, 2018). According to the desktop study, 210 vertebrate fauna species have been recorded and/or have the potential to occur within the application area comprising 27 mammals, 112 birds, 63 reptiles and eight amphibian species. Of the 210 species, 26 are listed as being of conservation significance, and only one, the Peregrine Falcon (*Falco peregrinus*; Schedule 7) was identified as possibly occurring within the area (Stantec, 2018). A total of 27 vertebrate fauna were recorded during the survey. None of the species recorded were of conservation significance (Stantec, 2018).

The fauna habitat types recorded within the application area are common and widespread within the surrounding regions, therefore are considered to be of limited significance to fauna (Stantec, 2018).

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

#### Methodology Stantec (2018)

GIS Database:

- Imagery
- Pre-European Vegetation
- Threatened Fauna

## (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

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Stantec, 2018).

The vegetation associations within the application area are common and widespread within the region (Stantec, 2018; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened (rare) flora.

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

Methodology Stantec (2018)

GIS Database:

- Pre-European Vegetation
- 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 There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (GIS Database).

A flora and vegetation survey of the application area did not identify any TECs (Stantec, 2018).

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

Methodology Stantec (2018)

GIS Database:

- Threatened and Priority Ecological Communities Boundaries

- Threatened and Priority Ecological Communities Buffers

## (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

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

The application area falls within the Gascoyne Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Gascoyne Bioregion (Government of Western Australia, 2018). The application area is broadly mapped as Beard vegetation associations 18: Low woodland; mulga (*Acacia aneura*); and 39: Shrublands; mulga scrub (GIS Database). Approximately 99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2018).

Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands	
IBRA Bioregion – Gascoyne	18,075,219	18,067,441	~99	Least Concern	10.27	
Beard vegetation associations – WA						
18	19,892,306	19,843,729	~99	Least Concern	6.62	
39	6,613,567	6,602,578	~99	Least Concern	12.02	
Beard vegetation associations – Gascoyne Bioregion						
18	3,273,579	3,271,339	~99	Least Concern	9.66	
39	2,338,128	2,337,580	~99	Least Concern	13.93	

\* Government of Western Australia (2018)

\*\* Department of Natural Resources and Environment (2002)

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 (2018)
  - 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 There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database).

Watercourses within the region, such as the Ethel Creek located 5.8 kilometres east from the application area, are seasonal, only flowing briefly immediately following significant rainfall (Stantec, 2018).

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

Methodology Stantec (2018)

- GIS Database:
- Hydrography, Lakes
- Hydrography, linear

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

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

The application area lies within the Collier land system (GIS Database). This land systems has been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Collier land system is described as undulating stony uplands, low hills and ridges and stony lower plains supporting mulga shrubland. This land system is not generally susceptible to erosion (Payne et al., 1988).

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

### Methodology Payne et al. (1988)

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 likely to be at variance to this Principle

There are no conservation areas in the vicinity of the application area. The nearest DBCA (formerly DPaW) managed land is the Collier Range National Park which is located approximately 7.2 kilometres east of the application area (GIS Database). The proposed clearing is unlikely to impact on 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:

- DBCA Legislated Lands and Waters

## (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 Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Payne et al., 1988; Stantec, 2018). The proposed clearing is unlikely to result in significant changes to surface water flows.

The groundwater in the application area ranges between 500-1,000 milligrams per litre of Total Dissolved Solids (TDS). This is considered to be brackish groundwater. It would not be expected that the proposed clearing of 128.373 within a permit boundary of 784 hectares would cause salinity levels within the application or surrounding area to alter. The proposed clearing is unlikely to cause deterioration in the quality of underground water.

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

- Methodology Payne et al. (1988) Stantec (2018)
  - GIS Database:
  - Groundwater Salinity, Statewide
  - Hydrography, Linear
  - Public Drinking Water Source 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 climate of the region is semi-arid, with a low average rainfall of approximately 233.4 millimetres per year

(BOM, 2018).

There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events (Payne et al., 1988; Stantec, 2018). However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

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

Methodology BOM (2018)

Payne et al. (1988) Stantec (2018)s

GIS Database: - Hydrographic Catchments - Catchments

- Hydrography, linear

### Planning Instrument, Native Title, previous EPA decision or other matter.

#### Comments

The clearing permit application was advertised on 26 November 2018 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title determination (WC1999/013) over the area under application (DPLH, 2018). This was determined on 4 May 1999. 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 Aboriginal Sites of Significance within the application area (DPLH, 2018). 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 Water and Environmental Regulation and the Department of Biodiversity Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology DPLH (2018)

## 4. References

BoM (2018) Bureau of Meteorology Website – Climate Data Online, Three Rivers. Bureau of Meteorology. http://www.bom.gov.au/climate/data/ (Accessed 4 December 2018).

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.

http://maps.daa.wa.gov.au/AHIS/ (Accessed 5 December 2018).

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Payne, A.L., Mitchell, A.A., and Holman, W.F. (1988) An Inventory and Condition Survey of rangelands in the Ashburton River Catchment, Western Australia. Department of Agriculture, Western Australia.
- Stantec (2018) Abra Flora, Fauna and Vegetation Survey. Report for Galena Mining Limited, prepared by Stantec, November 2018.

Western Australian Herbarium (2018) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <u>https://florabase.dpaw.wa.gov.au/</u> (Accessed 5 December 2018).

### 5. Glossary

### Acronyms:

BoM Bureau of Meteorology, Australian Government

DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
DWER	Department of Water and Environmental Regulation, Western Australia
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 (2017) 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* 1950.

*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 1950*.

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.