

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details

Permit application No.: 9235/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Red 5 Limited

1.3. Property details

Property: Mining Lease 37/155
Local Government Area: Shire of Leonora
Colloquial name: St George Project

1.4. Application

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

73 Mechanical Removal Mineral Production and Associated Infrastructure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 May 2021

## 2. Site Information

## 2.1. Existing environment and information

### 2.1.1. Description of the native vegetation under application

**Vegetation Description** 

The vegetation of the application area is broadly mapped as the following Beard vegetation association: 18: Low woodland; mulga (*Acacia aneura*) (GIS Database).

A flora and vegetation survey was conducted over the application area and surrounds by Mattiske Consulting (Mattiske) during 12-16 June 2020. The following vegetation associations were recorded within the application area (Mattiske, 2020):

1a

Open low woodland of Acacia caesaneura, Acacia aneura var. intermedia, Acacia ayersiana, Acacia effusifolia, Acacia tetragonophylla, Exocarpos aphyllus and Hakea preissii over Cratystylis subspinescens, Eremophila youngii subsp. youngii, Frankenia fecunda, Frankenia pauciflora var. pauciflora, Lawrencia squamata, Senna artemisioides subsp. helmsii and mixed chenopods on skeletal clay with ironstone pebbles in micro channels.

1b

Low woodland of Acacia caesaneura, Acacia aneura var. intermedia, Acacia ayersiana and Acacia tetragonophylla over a sparse understorey mixture of Cratystylis subspinescens, Eremophila latrobei, Eremophila metallicorum, Eremophila scoparia, Senna artemisioides subsp. helmsii, Scaevola spinescens and Sclerolaena sp. on a mixture of cracking and skeletal clay with ironstone, dolorite and quartz pebbles on flats and low rises.

2b

Shrubland of Acacia aneura – Acacia quadrimarginea over shrubs including Grevillea inconspicua on rocky hill slopes.

2d

Shrubland of Acacia aneura on low erosional hills with mixed low shrubs, including Grevillea inconspicua.

**Clearing Description** 

St George Project.

Red 5 Limited proposes to clear up to 73 hectares of native vegetation within a boundary of approximately 81.271 hectares, for the purpose of mineral production and associated infrastructure. The project is located approximately 110 kilometres north of Leonora, within the Shire of Leonora.

**Vegetation Condition** 

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

tc

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

#### Comment

The vegetation condition was derived from a vegetation survey conducted by Mattiske (2020).

The proposed clearing is for the development of a small pit mine approximately 14 hectares in area, the creation of a new waste rock landform (WRL), a run of mine pad (ROM), topsoil storage areas and other infrastructure.

The application area is located in highly disturbed areas, which includes multiple historically mined costeans, underground workings and a closed landfill site (Red 5, 2021).

The vegetation within the application area has been mapped in 1995 and 2020 by Mattiske (2020). Vegetation types 2b and 2d include *Grevillea inconspicua*, a Priority 4 flora species which was recorded during the 1994 survey, but not during the 2020 survey (Mattiske, 2020). Vegetation types 2b and 2d are considered to be suitable habitat for *Grevillea inconspicua*.

## 3. Assessment of application against Clearing Principles

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

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

The clearing permit application area is located within the Eastern Murchison subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Murchison Bioregion (GIS Database). The Eastern Murchison subregion is characterised by its internal drainage and extensive areas of elevated red desert sandplains with minimal dune development (CALM, 2002). Vegetation is dominated by mulga woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and *Tecticornia* shublands (CALM, 2002).

A detailed flora survey was conducted over the application area and surrounds by Mattiske (2020) on 12-16 June 2020. The vegetation of the application area is dominated by *Acacia* woodlands and shrublands (Mattiske, 2020). No Threatened or Priority Ecological Communities were identified as potentially occurring within the application area and none of the vegetation types mapped and described are listed as Threatened or Priority Ecological Communities (Mattiske, 2020; Red 5, 2021; GIS Database).

A total of 63 flora species from 34 genera and 20 families were recorded within the application area and surrounds (Mattiske, 2020). A previous survey conducted by Mattiske (2020) in 1995 identified 164 flora species from 83 genera and 35 families, including four introduced species within the application area and surrounds. Priority flora species *Grevillea inconspicua* (P4) was recorded within the application area in 1995, however these locations were revisited during the 2020 survey and this species was not recorded (Mattiske, 2020). No Threatened or Priority flora species were recorded within the application area or surrounds (Mattiske, 2020).

No recent fauna surveys have been conducted over the application area (Red 5, 2021). Previous fauna surveys conducted in 1988 and 1995 did not record any conservation significant fauna species (Red 5, 2021). The application area is highly degraded, likely from heavy grazing from animals (Mattiske, 2020). It is unlikely that the application area supports higher fauna biodiversity in comparison to the surrounding area (GIS Database; Red 5, 2021).

The vegetation association, fauna habitat and landform types present within the application area, are well represented in surrounding areas (Mattiske, 2020; Red 5. 2021; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

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

### Methodology

CALM (2002) Mattiske (2020) Red 5 (2021)

#### GIS Database:

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

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

No recent fauna surveys have been conducted over the application area (Red 5, 2021). The majority of the application area is considered 'degraded' or 'completely degraded', with very limited vegetation considered 'good' (Keighery, 1994; Mattiske, 2020). The degraded nature of the application area suggests that the vegetation present is unlikely to provide significant habitat for any fauna species (Red 5, 2021; GIS Database).

A database search identified five conservation significant fauna species with records within the surrounding areas (GIS Database; Red 5, 2021). None of these species were considered likely to inhabit the application area due to no suitable habitat present (Red 5, 2021). The vegetation within the application area is common within the region (GIS Database).

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

### Methodology Keighery (1994)

Mattiske (2020) Red 5 (2021)

### 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, threatened 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 (Mattiske, 2020; Red 5, 2021).

The vegetation associations within the application area are common and widespread within the region (Mattiske, 2020; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora.

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

## Methodology Mattiske (2020)

#### 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 (Mattiske, 2020; Red 5, 2021).

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

#### Methodology Mattiske (2020)

Red 5 (2021)

### 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 Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association18: Low woodland; mulga (*Acacia aneura*) (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).

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  – Murchison	28,120,586	28,044,823	~99	Least Concern	7.78
Beard vegetation associations  – WA					
18	19,892,306	19,843,148	~99	Least Concern	6.62
Beard vegetation associations  – Murchison Bioregion					
19	12,403,172	12,363,252	~99	Least Concern	4.96

<sup>\*</sup> Government of Western Australia (2019)

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 (2019)

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 at variance to this Principle

There are no permanent watercourses or wetlands within the area proposed to clear (Red 5, 2021; GIS Database). One drainage line passes through the application area (GIS Database). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Red 5, 2021).

Based on the above, the proposed clearing is at variance to this Principle. However, the vegetation survey of the application area did not identify any riparian vegetation (Mattiske, 2020), and impacts from the proposed clearing to vegetation growing in association with watercourses is likely to be minimal.

#### Methodology

Mattiske (2020) Red 5 (2021)

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 may be at variance to this Principle

The application area lies within the Leonora, Bevon and Violet land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Leonora land system is described as low greenstone hills and stony plains, supporting mixed stony chenopod shrublands (Pringle et al., 1994). This land system is susceptible to erosion where perennial shrub cover has been reduced or soil surface is disturbed (Pringle et al., 1994).

The Bevon land system consists of irregular low ironstone hills with stony lower slopes supporting mulga shrublands (Pringle et al., 1994). This land system is susceptible to erosion where perennial shrub cover has been reduced or soil surface is disturbed (Pringle et al., 1994).

The Violet land system consists of undulating stony and gravelly plains and low rises, supporting mulga shrublands (Pringle et al., 1994). This land system is can be moderately susceptible to erosion where soil surface is disturbed (Pringle et al., 1994).

Based on the above, the proposed clearing may be at variance to this Principle. Potential impacts from soil erosion may be minimised by the implementation of a staged clearing condition

## Methodology

Pringle et al. (1994)

GIS Database:

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

- 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 Wanjarri Nature Reserve which is located approximately 65.4 kilometres northwest 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:

- 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

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). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Red 5, 2021). The proposed clearing is unlikely to result in significant changes to surface water flows.

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 Red 5 (2021)

GIS Database:

- 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 arid, with a low average rainfall of approximately 236.4 millimetres per year (BoM, 2021). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (Red 5, 2021). 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 (2021)

Red 5 (2021)

GIS Database:

- Hydrography, linear

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

#### Comments

The clearing permit application was advertised on 29 March 2021 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 are no native title claims over the area under application (DPLH, 2021). 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, 2021). 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 (2021)

#### 4. References

BoM (2021) Bureau of Meteorology Website – Climate Data Online, Leonora. Bureau of Meteorology. <a href="http://www.bom.gov.au/climate/data/">http://www.bom.gov.au/climate/data/</a> (Accessed 23 April 2021).

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <a href="https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS">https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS</a> (Accessed 23 April 2021).
- 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 (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <a href="https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics">https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</a>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske (2020) Assessment of Flora and Vegetation Values. St George, Great Western and Cables Mission Project Areas. Prepared for Red 5 Limited, by Mattiske Consulting Pty Ltd, July 2020.
- Pringle, H.J., Gilligan, S.A. and van Vreeswyk, A.M. (1994) An inventory and condition survey of rangelands in the north-eastern Goldfields, Western Australia. Technical Bulletin No. 87. Department of Agriculture and Food, Western Australia, Perth.

Red 5 (2021) Native Vegetation Clearing Permit – St George Project. Prepared by Red 5 Limited, March 2021.

### 5. Glossary

## **Acronyms:**

BC Act Biodiversity Conservation Act 2016, Western Australia
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)

DAWE
Department of Agriculture, Water and the Environment, Australian Government
DBCA
Department of Biodiversity, Conservation and Attractions, Western Australia
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)

**DoEE** Department of the Environment and Energy (now DAWE)

DoW Department of Water, Western Australia (now DWER)

**DPaW** Department of Parks and Wildlife, Western Australia (now DBCA)

DPIRD Department of Primary Industries and Regional Development, Western Australia

**DPLH** Department of Planning, Lands and Heritage, Western Australia

**DRF** Declared Rare Flora (now known as Threatened Flora)

**DWER** Department of Water and Environmental Regulation, Western Australia

**EPA**Environmental Protection Act 1986, Western Australia

EPA

Environmental Protection Authority, 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:**

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

#### T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

## EN Endangered species

Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for endangered fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for endangered flora.

## VU Vulnerable species

Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for vulnerable flora.

## **Extinct Species:**

## EX Extinct species

Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for extinct fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for extinct flora.

## EW Extinct in the wild species

Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable

notice.

## **Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

### MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

## CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018.

## OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

## P Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.