

# **Clearing Permit Decision Report**

# **Application details**

Permit application details

Permit application No.: 6770/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Process Minerals International Pty Ltd** 

1.3. Property details

Property: Mining Lease 15/717

> Mining Lease 15/1000 Shire of Coolgardie

**Local Government Area:** Colloquial name: Mt Marion Lithium Project

1.4. Application

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

292.23 Mechanical Removal Mineral Production

Decision on application

**Decision on Permit Application:** 

**Decision Date:** 5 November 2015

# 2. Site Information

# 2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

**Vegetation Description** 

Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two vegetation associations have been mapped within the application area (GIS Database):

- 9: Medium woodland; coral gum (Eucalyptus torquata) & goldfields blackbutt (E. le soufii); and
- 936: Medium woodland; salmon gum.

A vegetation survey over the majority of the application area was undertaken by Recon Environmental in September 2009. The following 12 vegetation associations were recorded within the application area (Recon Environmental, 2009):

- PEXW: Plain Eucalypt eremophila-chenopod woodland: consisted of an open Eucalyptus lesouefii woodland with E. longicornis and E. salmonophloia over Eremophila interstans subsp. interstans with Exocarpos aphyllus, above Senna artemisioides subsp. filifolia, Maireana georgei, M. trichoptera, Atriplex nummularia, Sclerolaena drummondii, Eremophila caerulea subsp. caerulea, E. parvifolia subsp. auricampa, and Acacia erinacea.
- GNEW: Greenstone, non-halophytic eucalypt woodland: characterised by the presence of Eucalyptus torquata growing on greenstone hills. While E. torquata may not always be dominant in terms of cover, there is an open low woodland beneath which is found a diverse shrub layer.
- PEMW: Plain, Melaleuca pauperiflora woodland: occurs on the undulating lower slopes between the hills and plains in the Mt Marion project area. The upper canopy is generally dominated by Eucalyptus longicornis over Melaleuca pauperiflora subsp. fastigiata above scattered low shrubs.
- RHSH: Rocky hillslope, shrubland: tall to medium shrubland dominated by Dodonaea lobulata with Eremophila oppositifolia, Trymalium myrtillus, Scaevola spinescens, Dodonaea microzyga subsp. acrolobata, and scattered Acacia tetragonophylla, Eremophila alternifolia, Acacia erinacea, Olearia muelleri with emergent Eucalyptus torquata shrubland on steep rocky slopes.
- PEEW: Plain, Eucalyptus eremophila woodland: consists of open Eucalyptus lesouefii woodland with E. ravida over Eremophila interstans subsp. interstans and E. alternifolia above Dodonaea lobulata, Senna artemisioides subsp. filifolia, Acacia erinacea, Olearia muelleri, and mixed shrubs in red/brown clay loam soils.
- SCJS: Stony closed jam shrubland: characterized by Acacia acuminata in the tall shrub layer with Acacia quadrimarginea and Melaleuca uncinata over Prostanthera semiteres subsp. semiteres and Dodonaea microzyga subsp. acrolobata with Mirbelia granitica and Cryptandra aridicola in the low shrub layer.
- GRHS: Granite hill mixed shrubland: tall to medium shrubland dominated by Acacia quadrimarginea

with A. acuminate, Eremophila granitica, Prostanthera semiteres subsp. semiteres, Philotheca brucei subsp. brucei, Dodonaea microzyga subsp. acrolobata, and Pimelea microcephala subsp. microcephala with occasional emergent Eucalyptus websteriana subsp. websteriana shrubland.

- PMXS: Plain mallee mixed shrubland: consists of scattered trees (Eucalyptus lesouefii with E. moderata) amongst Eucalyptus griffithsii with E. Celastroides subsp. celastroides, above Eremophila oppositifolia, E. oldfieldii, with Acacia acuminata, above Dodonaea lobulata, Senna artemisioides subsp. filifolia, Eremophila caerulea subsp. caerulea, Scaevola spinescens, Acacia erinacea, Olearia muelleri, and Westringia rigida.
- **PELM:** Plain *Eucalyptus longicornis* woodland with Melaleuca: occurs on the undulating lower slopes between the hills and plains in the Mt Marion project area. The upper canopy is generally dominated by *Eucalyptus longicornis* with *E. lesouefii*, over *Melaleuca sheathiana*, above *Senna artemisioides* subsp. *filifolia, Atriplex nummularia, Scaevola spinescens*, over scattered *Acacia erinaecea*, *Olearia muelleri, Westringia rigida* and *Eremophila parvifolia* subsp. *auricampa*.
- EWLS: Eucalyptus woodland over low shrubs on undulating slopes: Open woodland with Eucalyptus lesouefii, E. salmonophloia, E. celastroides subsp. celastroides and E. ravida over scattered low shrubs dominated by Eremophila caerulea subsp. caerulea with Olearia muelleri, Acacia erinacea and Maireana georgei. This habitat tends to occur mid slope on low hills in the Mt Marion project area.
- **SCAS:** Stony closed *Allocasuarina* shrubland: tall *Allocasuarina eriochlamys* subsp. *grossa* (Priority 3) shrubland with *Acacia acuminata* and *A. Quadrimarginea* over *Prostanthera semiteres* subsp. *semiteres*, and *Hybanthus floribundus* subsp. *curvifolius* on stony hillslopes.
- ECLS: Eucalyptus celastroides over low shrubs: consists of an open Eucalyptus celastroides subsp. celastroides shrubland over the low shrub Diocirea acutifolia (Priority 3). ECLS appears to occupy a narrow band on the lower slopes between low hill and plain habitats.

A portion of the application area at the western end was surveyed by Native Vegetation Solutions in May 2012 and identified the following two vegetation associations within the application area:

- Transitional Eucalyptus woodland over Melaleuca sheathiana;
- Allocasuarina helmsii shrubland.

# **Clearing Description**

Mt Marion Lithium Project.

Process Minerals International Pty Ltd (PMI) proposes to clear up to 292.23 hectares within a boundary of approximately 484.78 hectares for the purposes of mineral production. The project is located approximately 20 kilometres north-west of Kambalda within the Shire of Coolgardie.

#### **Vegetation Condition**

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).

#### Comment

The vegetation condition was derived from a report prepared by Recon Environmental (2009) and analysis of aerial photography and imagery (GIS Database).

The majority of the application area is covered by expired clearing permit CPS 3549/1. Approximately 100 hectares of vegetation was cleared under this permit, however, the area was not utilised and vegetation has regrown over the area.

## 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

Flora and vegetation surveys covering the application area have identified 14 different vegetation associations (Native Vegetation Solutions, 2012; Recon Environmental, 2009). The vegetation condition ranged from excellent to degraded condition, with over a third of the area being in degraded condition due to being previously cleared under CPS 3549/1 (Keighery, 1994; PMI, 2015: Recon Environmental, 2009).

The flora survey by Recon Environmental (2009) recorded a total of 133 taxa from 68 genera and 39 families. This level of flora taxa is indicative of a moderate level of diversity for this region (Recon Environmental, 2009). The following three species of priority flora have been recorded within the application area; *Austrostipa blackii* (Priority 3), *Allocasuarina eriochlamys* subsp. *grossa* (Priority 3) and *Diocirea acutifolia* (Priority 3) (Recon Environmental, 2009). A single *Austrostipa blackii* plant was recorded within the application area (Recon Environmental, 2009). There are three populations of *Allocasuarina eriochlamys* subsp. *grossa* within the application area (Recon Environmental, 2009). Two of the populations are within the proposed mine plan whilst the third is near the haul road and can be avoided (PMI, 2015). This species is known from numerous locations in the Coolgardie bioregion and is also found in the Nullarbor bioregion (Western Australian Herbarium, 2015). *Diocirea acutifolia* was recorded at six locations in the north-east of the application area (Recon Environmental, 2009). It is expected that the haul road will avoid most, if not all of these locations (PMI, 2015). The proposed clearing is not likely to have a significant impact on these priority flora species.

Fauna habitats within the application area have been observed to be generally lacking in habitat features such as leaf litter and fallen logs, both of which can drive fauna diversity (Rapallo, 2010). The fauna diversity is further limited due to the presence of feral cats and dogs and the disturbance associated with previous clearing permit CPS 3549/1 (Rapallo, 2010). Given the habitat present, the application area is not expected to support a high level of faunal diversity.

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

Methodology Keighery (1994)

Native Vegetation Solutions (2012) Recon Environmental (2009) Western Australian Herbarium (2015)

# (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

A fauna survey of the application area on Mining Lease 15/1000 was undertaken by Rapallo in March 2010. Part of the application area on Mining Lease 15/717 was surveyed by Bamford Consulting Ecologists in 2012. Habitats within the application area on Mining Lease 15/717 were considered to be widespread in the local area and region (Bamford Consulting Ecologists, 2012).

The Rapallo (2010) fauna survey, recorded the following fauna habitats within the application area:

- Greenstone Hills:
- Thickets of Acacia, Senna, Eremophila and Exocarpos formed under open mallee woodlands along shallow drainage gullies and washout zones;
- Exposed granite hills supported thickets of *Acacia*, *Exocarpos*, *Santalum*, *Eremophila* and *Olearia* under an open mallee woodland:
- Open woodlands over a dominant ground cover of *Dioceria acutifolia* with sparse *Melaleuca*, *Eremophila* and *Exocarpos*;
- Jam (Acacia acuminata) woodland; and
- Open Woodland with a dominant Boree (*Melaleuca pauperiflora*) midstory; and *Allocasuarina* woodland adjacent to exposed granite hills.

All habitats located in the application area were mallee woodland based systems with varying mid and understoreys (Rapallo, 2010). A large portion of the open mallee woodland systems contained mid-storeys comprised of a series of *Eremophila* and *Acacia* species. In general, there were no significant habitat features such as heavy leaf litter, rocky overhangs, tree hollows or permanent water holes (Rapallo, 2010). Some of the habitat types such as the exposed granite hills showed signs of disturbance from previous exploration activities. Fauna habitats have also been further degraded by the clearing of approximately 100 hectares under CPS 3549/1.

Of interest are the small areas of Jam (*Acacia acuminata*) woodland which were dotted throughout the application area (Rapallo, 2010). The Jam formed dense thickets in some areas and provided suitable habitat for a variety of bird species. But more importantly these thickets provide suitable habitat for the Malleefowl (*Leipoa ocellata* - Schedule 1; Vulnerable). Rapallo (2010) have stated that Malleefowl would have historically utilised this habitat and this is evident by the presence of extinct Malleefowl mounds which were sighted in this habitat type. However, there were signs of the Feral Cat and Dog recorded within the application area which is likely to have reduced the probability that extant populations of Malleefowl use this habitat type currently (Rapallo, 2010). Malleefowl have not been sighted during any of the flora or fauna surveys in the application area, or by previous staff who regularly frequented the site. Recon Environmental (2009) have stated that higher quality nesting habitat occurs to the north of the application area in a series of ranges which are relatively undisturbed. Based on this, it is unlikely the removal of this habitat type will significantly impact the overall conservation status of the Malleefowl.

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

Methodology Ba

Bamford Consulting Ecologists (2012)

Rapallo (2010)

Recon Environmental (2009)

# (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 species within the application area (GIS Database). None of the flora surveys recorded any Threatened Flora species within the application area (Native Vegetation Solutions, 2012; Recon Environmental, 2009).

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

## Methodology Native Vegetation Solutions (2012)

Recon Environmental (2009)

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 Threatened Ecological Communities (TECs) within the application area (GIS Database). The vegetation surveys did not identify any vegetation communities considered to be a TEC within the application area (Native Vegetation Solutions, 2012; Recon Environmental, 2009).

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

## Methodology Native Vegetation Solutions (2012)

Recon Environmental (2009)

GIS Database:

- Threatened Ecological Sites Buffered

# (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 Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 97.96% of the pre-European vegetation remains (Government of Western Australia, 2014; GIS Database).

The vegetation of the application area has been broadly mapped as Beard vegetation associations 9 and 936. These vegetation associations have not been extensively cleared as over 96% remains at both a State and bioregional level (Government of Western Australia, 2013). There has not been extensive clearing in the local region and the vegetation within 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 (2014)

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 not likely to be at variance to this Principle

There are no permanent watercourses within the application area (GIS Database). There are two minor, non-perennial watercourses which intersect the north-west of the application area (GIS Database). These drainage lines will be intersected by the proposed haul road (PMI, 2015).

Recon Environmental (2009) have stated that there are no riparian vegetation associations recorded within the application area. The drainage line areas are noted as being:

- PREXW: Plain Eucalypt Eremophila Chenopod woodland areas.

According to Recon Environmental (2009) the drainage lines in question are not defined drainage lines but rather areas which concentrate minimal water flow and then pan out to sheet flow in lower lying areas.

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

# Methodology PMI (2015)

Recon Environmental (2009)

GIS Database:

- 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

Land systems have not been mapped over the application area, however, the areas adjacent to the application area have been mapped as the Graves, Gumland and Moriarty land systems (GIS Database). Areas within these land systems may be susceptible to erosion if shrub cover is removed, in particular if it is removed from drainage tracts (Pringle et al. 1994). Potential impacts from erosion may be minimised by the implementation of a staged clearing condition.

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

#### Methodology

Pringle et al. (1994)

GIS Database:

- Rangeland land system mapping

# (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

The application area does not lie within any conservation areas or Department of Parks and Wildlife managed lands (GIS Database). The nearest conservation area is the Yallari Timber Reserve which is located approximately 4.5 kilometres west of the application area (GIS Database). The proposed clearing will not impact on the environmental values of this 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 permanent watercourses within the application area (GIS Database). There are two ephemeral drainage lines that cross the north-west of the application area (GIS Database). According to Recon Environmental (2009) these drainage lines are not defined drainage lines but rather areas which concentrate minimal water flow and then pan out to sheet flow in lower lying areas.

The application area is not located within a Public Drinking Water Source Area (GIS Database). The proposed clearing area is characterised by saline groundwater of between 14,000 to 35,000 milligrams/Litre TDS (GIS Database). The water table is below 100 metres depth in the northern part of the application area and below 70 metres in the southern areas of the application area (Newland Environmental, 2009). Given the groundwater is already hypersaline, and the depth of groundwater, it is unlikely that the proposed clearing will have a significant impact on groundwater quality.

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

#### Methodology

Newland Environmental (2009)

Recon Environmental (2009)

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 266.1 millimetres and an average annual evaporation rate of 2,600 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2015; GIS Database). 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 (2015)

GIS Database:

- Evaporation Isopleths

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

#### Comments

There are no native title claims over the application area (Department of Aboriginal Affairs, 2015). This claim has been registered with the National Native Title Tribunal on behalf of the claimant groups. However, the 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*.

According to available databases, there are no registered Aboriginal sites of significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 12 October 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

## Methodology

Department of Aboriginal Affairs (2015)

GIS Database:

- Aboriginal Sites Register System

## 4. References

Bamford Consulting (2012) Fauna Assessment of the Mt Marion Mining Lease Area. Unpublished report prepared by Jeff Turpin, Mike Bamford, M.J. & A.R. Bamford Consulting Ecologists for Alcer Gold Corp dated 2 April 2012.

BoM (2015) Bureau of Meteorology Website - Climate statistics for Australian locations, Coolgardie. Available online at: http://www.bom.gov.au/climate/averages/tables/cw 012018.shtml Accessed on 2 November 2015.

Department of Aboriginal Affairs (2015) Aboriginal Heritage Inquiry System. Accessed on 2 November 2015.

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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.

Native Vegetation Solutions (2012) Level 1 Flora and Vegetation Survey for the Expansion of the Mt Marion Mining Area Alcer Gold South Kalgoorlie Operations (M15/717). Unpublished report prepared by Native Vegetation Solutions for Alcer Gold dated July 2012.

Newland Environmental (2009) Reed Industrial Minerals Pty Ltd - Supporting information for a native clearing permit application. December 2009.

PMI (2015) Supporting information for clearing permit application CPS 6770/1. Dated 11 September 2015.

Pringle, H.J.R., Van Vreeswyk, A.M.E., & Gilligan, S.A. (1994) An inventory and condition survey of rangelands in the northeastern Goldfields, Western Australia. Department of Agriculture. South Perth.

Recon Environmental (2009) Mt Marion Lithium Project Vegetation Survey. Supporting Documentation. Unpublished report prepared December 2009 for Reed Industrial Minerals Pty Ltd.

Rapallo (2010) Terrestrial Fauna Habitat Assessment (Reconnaissance - Level One) Mount Marion Lithium Project. Unpublished report prepared for Process Minerals International, dated 10 June 2010.

Western Australian Herbarium (2015) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <a href="http://florabase.dpaw.wa.gov.au/">http://florabase.dpaw.wa.gov.au/</a> Accessed 2 November 2015.

# 5. Glossary

### Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment 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

s.17 Section 17 of the Environment Protection Act 1986, Western Australia

TEC Threatened Ecological Community

# **Definitions:**

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

#### T Threatened species:

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

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

#### Rankings:

CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.

EN: Endangered - considered to be facing a very high risk of extinction in the wild.

VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

#### X Presumed Extinct species:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

## IA Migratory birds protected under an international agreement:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.

Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

## S Other specially protected fauna:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

## P1 Priority One - Poorly-known species:

Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

# P2 Priority Two - Poorly-known species:

Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

## P3 Priority Three - Poorly-known species:

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

# 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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

# P5 Priority Five - Conservation Dependent species:

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.