



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7673/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Avoca Mining Pty Ltd

### 1.3. Property details

Property: Mining Lease 15/338  
Mining Lease 15/639  
Mining Lease 15/640  
Mining Lease 15/1790  
General Purpose Lease 15/29  
Local Government Area: Shire of Coolgardie  
Colloquial name: Mitchell Project

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 433                |           | Mechanical Removal | Mineral Production  |

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 31 August 2017

## 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. One Beard vegetation association has been mapped within the application area (Government of Western Australia, 2016; GIS Database):

- 8: Medium woodland; salmon gum & gimlet

A level one flora and vegetation survey has been undertaken over the application area by Native Vegetation Solutions (2017), which recorded five vegetation groups across the application area, which are:

**A: *Eucalyptus lesouefii* over *Cratystylis conocephala* and sclerophyll Shrubland;**

**B: *Eucalyptus salmonophloia* woodland over sclerophyll shrubland;**

**C: *Eucalyptus salubris* over *Melaleuca sheathiana*;**

**D: Mixed *Eucalyptus* woodland over mixed shrubland; and**

**E: Existing Disturbance.**

**Clearing Description** Mitchell Project  
Avoca Mining Pty Ltd (Avoca) proposes to clear 433 hectares of native vegetation within a total boundary of approximately 518.68 hectares for the purpose of mineral production. The project is located approximately 50 kilometres north of Norseman, in the Shire Coolgardie.

**Vegetation Condition** Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

To

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

**Comment** The vegetation condition was determined by botanists from Native Vegetation Solutions (2017).

### 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 application area occurs within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Eastern Goldfields subregion is characterised by calcareous earths that cover much of the plains and greenstone areas (CALM, 2002). A series of playa lakes in the western half are the remnants of an ancient major drainage line (CALM, 2002). The vegetation is of mallees, Acacia thickets and shrubheaths on sandplains (CALM, 2002). Diverse Eucalypt woodlands occur around salt lakes, on ranges and in valleys (CALM, 2002).

A total of five vegetation communities have been mapped across the application area (Native Vegetation Solutions, 2017). The most dominant vegetation community was the *Eucalyptus salmonophloia* woodland community, which accounted for approximately 38% of the application area (Native Vegetation Solutions, 2017). None of the vegetation communities mapped within the application area represent Threatened or Priority Ecological Communities (Native Vegetation Solutions, 2017).

Native Vegetation Solutions (2017) has recorded a total of 94 plant species in the application area from 42 genera and 19 families. There were no Threatened flora species identified in the application area (Native Vegetation Solutions, 2017).

One Priority three species; *Diocirea acutifolia*, was recorded at multiple locations within the application area. This species is widespread and in large numbers through the local and regional area and is well documented by previous flora surveys (Native Vegetation Solutions, 2017). NatureMap (DPaW, 2017) confirms that this species has been recorded in around the Coolgardie, Kambalda and Norseman area. Given this species is found outside of the application area in sufficient numbers, the proposed clearing is not likely to significantly impact on this species.

Three introduced plant taxa were recorded in the application area (Native Vegetation Solutions, 2017). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

According to NatureMap (DPaW, 2017), there are 74 fauna species records within 20 kilometres of the application area, consisting of 33 bird, 27 reptile, 11 mammal, and 3 invertebrate species. According to Native Vegetation Solutions (2017), the broad habitat types recorded in the application area are widespread in the region, therefore the application area is not considered to represent an area or relatively higher fauna diversity.

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

##### Methodology

CALM (2002)  
DPaW (2017)  
Native Vegetation Solutions (2017)

GIS Database:  
- IBRA WA (Regions - Sub Regions)

**(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**

No targeted fauna surveys were undertaken within the application area, however Terrestrial Ecosystems (2015) has undertaken a habitat assessment and reconnaissance survey over an area adjacent to the application area, and identified one broad habitat type: mixed eucalypt woodland over mixed sclerophyll shrubland with or without chenopods. The condition of this habitat type ranged from poor to good, but not considered to provide high quality habitat (Terrestrial Ecosystems, 2015).

Terrestrial Ecosystems (2015) did not undertake a detailed fauna survey over the area, however they have identified 21 conservation significant fauna species that may potentially be found in the region. The majority of these species have not been recently recorded in the vicinity of the survey area, however based on habitat preference and distribution, the following may occur within the application area:

- Malleefowl (*Leipoa ocellata*) (Vulnerable);
- Rainbow Bee-eater (*Merops ornatus*) (Migratory);
- Fork-tailed Swift (*Apus pacificus*) (Migratory) ; and
- Western Rosella (*Platycercus icterotis xanthogenys*) – Priority 4.

The Malleefowl occurs in semi-arid and arid zones of temperate Australia, where it occupies shrublands and low woodlands that are dominated by mallee vegetation (Department of the Environment and Energy (DEE), 2017). The breeding habitat of the Malleefowl, within its home range, is characterised by light soil and an abundant leaf litter which is used in the construction of mounds (DEE, 2017). Terrestrial Ecosystems (2015) did not record any evidence (e.g. tracks or mounds) of Malleefowl in the survey area and there is similar habitat likely to be present in the area adjacent to this application's permit boundary (GIS Database). The proposed clearing is unlikely to significantly impact on this species.

The proposed clearing is unlikely to impact on the remaining species as they are considered highly mobile and would likely move to adjacent undisturbed habitat.

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

**Methodology** DEE (2017)  
Terrestrial Ecosystems (2015)

**(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 datasets, there are no known records of Threatened flora within the application area (GIS Database). The nearest record of Threatened flora is located approximately 40 kilometres south-east of the application area (GIS Database).

The flora assessment undertaken by Native Vegetation Solutions (2017) did not identify any Threatened flora within the application area.

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

**Methodology** Native Vegetation Solutions (2017)

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 known Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is located approximately 238 kilometres west of the application area.

Native Vegetation Solutions (2017) did not identify any TECs in the flora assessment of the application area.

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

**Methodology** Native Vegetation Solutions (2017)

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 falls within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database) in which approximately 97.96% of pre-European vegetation remains (Government of Western Australia, 2015). This gives it a conservation status of 'Least Concern' according to the Bioregional Conservation Status of Ecological Vegetation Classes (Department of Natural Resources and Environment, 2002).

The vegetation within the application area is recorded as Beard vegetation association:

- 8: Medium woodland; salmon gum & gimlett

Beard vegetation association 8 retains approximately 49.98% of pre-European extent at the state level and approximately 98% the bio-region level (Government of Western Australia, 2014).

|   | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Pre-European % in DPaW Managed Land |
|---|-------------------------|----------------------|--------------|-----------------------|-------------------------------------|
| IBRA Bioregion - Coolgardie               | 12,912,204              | 12,648,491           | ~97.96       | Least Concern         | ~16.39                              |
| Beard vegetation associations - State     |                         |                      |              |                       |                                     |
| 8   | 694,638                 | 346,569              | ~49.89       | Depleted              | ~6.81                               |
| Beard vegetation associations - Bioregion |                         |                      |              |                       |                                     |
| 8   | 280,248                 | 275,589              | ~98          | Least Concern         | ~9.52                               |

\* Government of Western Australia (2016)

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

Although Beard vegetation association 8 is considered depleted at the State level, it will remain above the 30% threshold level recommended in the National Objectives Targets for Biodiversity Conservation below which, species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

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

**Methodology** Department of Natural Resources and Environment (2002)  
EPA (2000)  
Government of Western Australia (2016)

GIS Database:  
- IBRA WA (Regions - Sub Regions)  
- 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 at variance to this Principle**

According to available databases, there are no wetlands or watercourses within the application area (GIS Database).

Native Vegetation Solutions (2017) did not record any vegetation growing in association with a wetland or watercourse within the application area.

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

**Methodology** Native Vegetation Solutions (2017)

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**

The application area is located within the Kambalda Soil-Landscape Zone (Tille, 2006). This zone is characterised by flat to undulating plains (with hills, ranges and some salt lakes and stony plains) on greenstone and granitic rocks of the Yilgarn Craton (Tille, 2006). Soils comprise calcareous loamy earths and red loamy earths with salt lakes soils and some red/brown hardpan shallow loams and red sandy duplexes (Tille, 2006).

The proposal to clear 433 hectares of native vegetation is considered to be a relatively large area and may lead to land degradation through soil erosion. According to Northcote et al (1960 -1968), the application area is within an area of sandy soils which can be susceptible to wind erosion. Although typical surface runoff would be minimal given the climate (BoM, 2017), high rainfall events may cause short-term erosion through the transportation of sediments in surface flows. Potential impacts from land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

The application area has an annual average evaporation rate of approximately eight times the annual average rainfall (BoM, 2017; GIS Database). Based on this information, surface flows during normal rainfall events are likely to be short lived and recharge to groundwater would be considered minimal. This would reduce the likelihood of salinity increasing as a result of the proposed clearing.

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

**Methodology** BoM (2017)  
Northcote et al (1960 – 1968)  
Tille (2006)

GIS Database:  
- Evaporation Isopleths

**(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 is not located within any conservation areas. The nearest conservation area is Binaronca Nature Reserve, which is located approximately six kilometres north-west of the application area (GIS Database). Aerial imagery shows continuous vegetation around the reserve, therefore the proposed clearing is not likely to disrupt any linkages to the reserve (GIS Database). Given the distance between the application area and Binaronca Nature Reserve, the proposed clearing is not likely to impact on the conservation area.

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

**Methodology** GIS Database:  
- DPaW Tenure

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

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

According to available databases the application area is not located within a Public Drinking Water Source Area (GIS Database).

There are no permanent water bodies or watercourses within the application area.

The climate of the area is arid to semi-arid with rainfall that usually occurs in winter but sometimes occurs in summer (CALM, 2002). The application area receives an average annual rainfall of approximately 289 millimetres with an average annual evaporation rate of between 2,400 and 2,800 millimetres (BoM, 2017; GIS Database). Any surface flows are therefore likely to be short lived.

Groundwater salinity in the local area is estimated to be between 14,000 – 35,000 milligrams/Litre Total Dissolved Solids (TDS), which is considered saline (GIS Database). The proposed clearing is not likely to significantly alter groundwater salinity levels within the application area.

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

**Methodology** BoM (2017)  
CALM (2002)

GIS Database:  
- Evaporation Isopleths

- PDWSAs
- Salinity - Statewide
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

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

With an average annual rainfall of 289 millimetres and an average annual evaporation rate of between 2,400 and 2,800 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2017; GIS Database). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.

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

**Methodology BoM (2017)**

GIS Database:  
- Evaporation Isopleths

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

**Comments**

There is one native title claim (WC1999/002) over the application area (Department of Planning, Lands and Heritage, 2017). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Sites of Aboriginal Significance located in the area applied to clear (Department of Planning, Lands and Heritage, 2017). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Biodiversity Conservation and Attractions and the Department of Water and Environmental Regulation, 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 31 July 2017 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. There were no submissions received.

**Methodology Department of Planning, Lands and Heritage (2017)**

**4. References**

- BoM (2017) Climate Statistics for Australian Locations. A Search for Climate Statistics for Norseman Airport, Australian Government Bureau of Meteorology. <http://www.bom.gov.au> (Accessed 28 August 2017).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.
- Department of Planning, Lands and Heritage (2017) Aboriginal Heritage Enquiry System. Government of Western Australia. <https://maps.daa.wa.gov.au/AHIS/> (Accessed 28 August 2017)
- 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.
- DEE (2015) *Leipoa ocellata* (Malleefowl) in Species Profile and Threats Database. Department of the Environment and Energy. Canberra. <http://www.environment.gov.au/sprat>. (Accessed 28 August 2017).
- DPaW (2017) NatureMap - Mapping Western Australia Biodiversity. Department of Parks and Wildlife. Western Australia. <http://naturemap.dec.wa.gov.au/default.aspx>. (Accessed 28 August 2017).
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- Government of Western Australia (2016) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, 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 (2017) Level 1 Flora and Vegetation Survey of the Mitchell Project Area, Higginsville (M15/338, M15/639, M15/640, M15/1790 and G15/29). Report prepared for Avoca Mining Pty Ltd by Native Vegetation Solutions, June 2017.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Terrestrial Ecosystems (2015) Level 1 Vertebrate Fauna Risk Assessment for the Fairplay Pit and Waste Landform Expansion and Development (CPS 6644/1). Unpublished report prepared for Native Vegetation Solutions.

Tille, P. (2006) Soil-landscapes of Western Australia's Rangelands and Arid Interior. Technical Report 313. Department of Agriculture and Food, Western Australia. ISSN 1039-7205.

## 5. Glossary

### Acronyms:

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

### Definitions:

{DPaW (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.

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

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

#### **CR**

#### **Critically endangered species**

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

#### **EN**

#### **Endangered species**

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

#### **VU**

#### **Vulnerable species**

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

- EX Presumed extinct species**  
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.
- IA Migratory birds protected under an international agreement**  
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD Conservation dependent fauna**  
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS Other specially protected fauna**  
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P Priority species**  
Species which are poorly known; or  
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1 Priority One - Poorly-known species:**  
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species:**  
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species:**  
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:**  
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.  
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.