Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7322/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 47/417
Miscellaneous Licence 47/420
Miscellaneous Licence 47/515
Local Government Area: Shire of East Pilbara
Colloquial name: Hope Downs 1 - 4 Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
153		Mechanical Removal	Powerline maintenance, installation of firebreaks and associated activities.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 8 December 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been mapped as the following three Beard vegetation associations (GIS Database):

18: Low woodland; Mulga (*Acacia aneura*),
29: Sparse low woodland; mulga, discontinuous in scattered groups,
82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.

A Level 2 Flora and Vegetation Survey of the application area was undertaken by Mattiske (2008). The vegetation survey identified the following 16 vegetation units in the application area:

1. **C1** - Open woodland of *Eucalyptus victrix, Eucalyptus camaldulensis* var. *obtusa* over *Acacia citrinoviridis* and *Acacia coriacea* subsp. *pendens* over *Petalostylis labicheoides, Gossypium robinsonii, Acacia pyrifolia, Melaleuca lasiandra,* and *Androcalva luteiflora* over *Tephrosia rosea* var. *clementi, Themeda triandra, Cyperus vaginatus* and *Cleome viscosa* on major creeklines with sandy soils,
2. **C2** - Low woodland of *Eucalyptus xerothermica* and *Eucalyptus victrix* over *Acacia citrinoviridis*, *Acacia maitlandii, Gossypium australe*, *Melaleuca lasiandra*, *Petalostylis labicheoides, Androcalva luteiflora* over *Triodia epactia*, *Chrysopogon fallax* and *Triodia pungens* on minor creeklines with sandy soils,
3. **C3** - Tall shrubland of *Acacia arida, Acacia bivenosa, Acacia ancistrocarpa, Acacia maitlandii, Acacia monticola* with occasional emergent *Corymbia deserticola* subsp. *deserticola, Eucalyptus gamophylla* and *Eucalyptus leucophloia* over *Gompholobium polyzygum, Indigofera monophylla*, *Androcalva luteiflora* over mixed *Triodia* species on sandy-loam soils in minor gullies,
4. **X3** - Tall shrubland of *Acacia bivenosa, Acacia monticola, Acacia marramamba, Petalostylis labicheoides* with occasional emergent *Eucalyptus leucophloia* over *Triodia pungens* and *Triodia basedowii* on calcrete soils in minor gullies,
5. **M1** - Low woodland to low open forest of *Acacia aneura, Acacia pruinocarpa, Acacia catenulata* subsp. *occidentalis, Acacia rhodophloia, Grevillea b*erryana with an occasional emergent *Eucalyptus leucophloia* and *Eucalyptus gamophylla* over *Psydrax latifolia, Seringia nephrosperma, Acacia distans, Eremophila fraseri, Acacia tetragonophylla*, *Eremophila forrestii* subsp. *forrestii*, *Solanum lasiophyllum* over *Chrysopogon fallax*, *Triodia pungens* and *Triodia epactia* and a range of annual species on sandy loam flats and broad plains,
6. **M2** - Low woodland of *Acacia aneura* to a tall shrubland of *Acacia pyrifolia, Acacia bivenosa, Acacia ancistrocarpa* and *Acacia maitlandii* with occasional emergent *Eucalyptus xerothermica, Corymbia aspera, Psydrax latifolia* and *Acacia citrinoviridis* over *Gompholobium polyzygum, Androcalva luteiflora, Themeda triandra, Triodia epactia* and *Triodia pungens* on sandy soils on flats on edges of major creeklines,
7. **M5** - Low woodland of *Acacia aneura* to a tall shrubland of *Acacia pyrifolia, Acacia bivenosa, Acacia ancistrocarpa* and *Acacia maitlandii* with occasional emergent *Eucalyptus xerothermica, Corymbia aspera, Psydrax latifolia* and *Acacia citrinoviridis* over *Gompholobium polyzygum, Androcalva luteiflora, Themeda triandra, Triodia epactia* and *Triodia pungens* on sandy soils on flats on edges of major

creeklines,

8. **M6** - Grassland of *Aristida* and *Enneapogon* species with emergent *Acacia aneura, Acacia citrinoviridis* over occasional low subshrub and patches of *Triodia angusta* on cracking clays on flats,
9. **M7** - Low open woodland of *Acacia aneura, Acacia pruinocarpa* over *Acacia bivenosa* and *Triodia pungens* and a range of annual species on open sandy-loam flats and broad plains,
10. **B1** - Hummock grassland of *Triodia basedowii, Triodia wiseana* and *Triodia pungens* with emergent patches of *Eucalyptus leucophloia, Acacia citrinoviridis, Acacia aneura, Acacia pruinocarpa, Acacia synchronicia* over *Eremophila latrobei* subsp. *glabra*, *Senna glutinosa* subsp. *glutinosa, Solanum lasiophyllum, Eriachne mucronata* and species of *Maireana* and *Triodia* on narrow breakaways and rocky slopes on edges of hills and ranges,
11. **S1** - Hummock grassland of *Triodia epactia* with pockets of *Triodia basedowii* and *Triodia pungens* with emergent *Corymbia hamersleyana, Eucalyptus gamophylla, Eucalyptus leucophloia* over *Acacia aneura, Acacia pruinocarpa, Acacia rhodophloia, Codonocarpus cotinifolius, Psydrax latifolia* and *Grevillea berryana* over *Acacia adoxa* var. *adoxa, Acacia arida, Acacia tenuissima, Acacia tetragonophylla, Acacia bivenosa, Acacia distans, Acacia hilliana, Eremophila latrobei* and *Eremophila forrestii* subsp. *forrestii* over range of annual species on gravelly soils on lower slopes,
12. **S2** - Hummock grassland of *Triodia basedowii, Triodia* aff. *wiseana* and *Triodia epactia* with emergent *Acacia pruinocarpa, Acacia inaequilatera, Corymbia deserticola* subsp. *deserticola, Corymbia hamersleyana, Eucalyptus leucophloia* and *Eucalyptus gamophylla* over *Eremophila latrobei, Acacia adoxa* var. *adoxa, Acacia arida, Acacia bivenosa, Eremophila exilifolia, Acacia spondylophylla, Acacia ancistrocarpa, Acacia bivenosa, Acacia inaequilatera, Acacia hilliana, Indigofera monophylla* and a range of annual species on gravelly soils on mid and upper slopes of small ranges,
13. **S3** - Hummock grassland of *Triodia wiseana* with emergent *Eucalyptus leucophloia, Corymbia hamersleyana* over *Acacia adoxa* var. *adoxa, Acacia hilliana, Acacia marramamba, Codonocarpus cotinifolius, Indigofera monophylla, Hakea lorea* subsp. *lorea* over *Goodenia stobbsiana* and mixed *Senna* and *Ptilotus* species on gravelly soils on mid and upper slopes of ranges,
14. **S4** - Hummock grassland of *Triodia basedowii* and *Triodia pungens* with emergent *Eucalyptus leucophloia, Hakea lorea* subsp. *lorea, Grevillea wickhamii, Acacia ancistrocarpa, Acacia bivenosa, Acacia inaequilatera* over a range of annual species on low hills and ranges,
15. **X2** - Hummock grassland of *Triodia wiseana* with emergent *Eucalyptus socialis* over *Melaleuca eleuterostachya, Senna artemisioides* subsp. *oligophylla, Acacia maitlandii* (narrow form), *Calytrix carinata* and *Acacia bivenosa, Themeda triandra* and a range of annual species on calcrete soils on lower slopes,
16. **X4** - Hummock Grassland of *Triodia basedowii, Triodia wiseana* and *Triodia pungens* with emergent *Eucalyptus leucophloia* and *Corymbia hamersleyana* over *Acacia adoxa* var. *adoxa, Acacia tetragonophylla, Mirbelia viminalis, Acacia victoriae, Eremophila cuneifolia, Acacia hamersleyensis, Petalostylis labicheoides, Senna glutinosa* subsp. *glutinosa* and *Acacia bivenosa* and a range of annual species on calcrete soils on lower slopes.

Clearing Description

Hope Downs 1 - 4 Project
Hamersley Iron Pty Ltd (Hamersley Iron) proposes to clear up to 153 hectares of native vegetation within a total boundary of approximately 179 hectares for the purpose of maintaining safe clearances and creating a firebreak under the power transmission line corridor from Hope Downs 1 to Hope Downs 4. The project is located approximately 35 kilometres north-west of Newman within the Shire of East Pilbara.

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

to

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

Comment

The proposed clearing is required for the purpose of installing firebreaks and undertaking power line maintenance and associated activities and removing vegetation in close proximity to the Hope Downs 1 - 4 powerline infrastructure. Clearing activities will be undertaken over a distance of 53 kilometres. The firebreak will be established using a dozer/grader (blade down) whilst all other vegetation removal will be undertaken using other items such as a chainsaw (Rio Tinto, 2016). The application area has been modified by the existing transmission line (infrastructure and tracks), exploration activities, mining infrastructure (railways, roads and tracks) and pastoral activities. Approximately 12.5 % (22.3 hectares) of the study area has been mapped as cleared (Rio Tinto, 2016).

3. Assessment of application against clearing principles

Comments

The application area occurs within the Pilbara Interim Biogeographical Regionalisation for Australia (IBRA) bioregion (CALM, 2002; GIS Database). The Pilbara IBRA region comprises a diverse range of landform features and has not been extensively cleared as approximately 99% of the pre-European vegetation remains (Government of Western Australia, 2015; GIS Database). Parts of the application area have been previously cleared and are not representative of the three mapped Beard vegetation associations (Rio Tinto, 2016; GIS Database). The application area is neither a remnant nor does it form part of any remnants within the local area (GIS Database).

According to available databases, there are no Threatened Ecological Communities (TEC's) or Priority Ecological Communities (PEC's) occurring within the application area (GIS Database). The Weeli Wolli Spring Community, (Priority 1) PEC is located approximately 1.1 kilometres to the north-east of the application area (GIS Database). The PEC is related to the vegetation growing in association with permanent natural springs occurring along Weeli Wolli Creek. The Weeli Wolli PEC is approximately 281 hectares in size and it is unlikely that the proposed clearing will impact on the conservation values of the PEC. The flora survey undertaken by Mattiske in 2008 did not record any vegetation associations that are representative of listed TEC's or PEC's (Mattiske, 2008).

A comprehensive Level 2 flora survey was undertaken over a broad survey area of 8,856.9 hectares (Mattiske, 2008). The survey recorded 301 flora taxa from 124 genera representing 42 families (Mattiske, 2008). However, the current application area is smaller in size, does not represent the diversity in landforms as the survey area and it is likely the application area would contain substantially fewer taxa.

Two conservation significant flora species *Lepidium catapycnon* (Priority 4) and *Goodenia* sp. East Pilbara (Priority 3) were recorded within the application area (Rio Tinto, 2016). *L. catapycnon* and *Goodenia* sp. East Pilbara are not restricted to the application area and occur throughout the Pilbara region. *L. catapycnon* is known from 3,337 records in the area and 31 plants are known to occur in the application area (Rio Tinto, 2016). *Goodenia* sp. East Pilbara is known to occur from 1,889 records in the area and two locations recorded this species within the application area (Rio Tinto, 2016). Rio Tinto (2016) confirmed clearing impacts to *L. catapycnon* and *Goodenia*. sp. East Pilbara will be avoided where possible, by using restriction zones around areas where these individuals are located (Rio Tinto, 2016).

No introduced (weed) species have been recorded in the application area. However, eighteen weed species have been recorded in the vicinity of the application area or are known from the local area (Rio Tinto, 2016). Weed invasion has the potential to alter the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No recent fauna surveys have been undertaken over the application area. A search of DPaW's NatureMap database revealed records of eight conservation significant fauna within a 20 kilometre radius of the application area (Rio Tinto, 2016). The majority of these conservation significant fauna were considered unlikely to occur in the application area due to the lack of suitable habitat present (Rio Tinto, 2016). The search of available biological databases confirmed no Threatened fauna were located in the application area (GIS Database). Of the fauna recorded within the vicinity of the application area, the database search revealed seven amphibians, 94 reptiles, 130 birds and 32 mammal species (Rio Tinto, 2016).

The application area contains previously cleared vegetation and is not likely to contain higher fauna diversity than surrounding areas. The vegetation types and landforms are also well represented in surrounding areas. For these reasons, it is unlikely the proposal will result in the clearing of native vegetation that comprises a high level of biodiversity.

There are four ephemeral watercourses that intersect the application area including Weeli Wolli Creek. The application area supports riparian vegetation that is growing in, or in association with a watercourse including *Eucalyptus victrix, Eucalyptus camaldulensis* var. *obtusa*, *Acacia citrinoviridis* and *Acacia coriacea* subsp. *pendens* over *Petalostylis labicheoides*, *Gossypium robinsonii, Acacia pyrifolia, Melaleuca lasiandra*, *Tephrosia rosea* var. *clementi, Themeda triandra* and *Cyperus vaginatus* (DPaW, 2016, Rio Tinto, 2016). The C1 vegetation unit (creekline vegetation) represents riparian vegetation in the application area (Rio Tinto, 2016). The application area contains wetland dependent vegetation which will be cleared as part of the proposal.

However, the potential clearing of creekline vegetation (C1 vegetation unit) is considered to be a relatively small portion (3.9 hectares or 2.2% of vegetation) when compared to the overall clearing footprint of 153 hectares (Rio Tinto, 2016). Parts of the C1 vegetation unit have also been heavily disturbed and cleared (Rio Tinto, 206; GIS Database). The application area has also been modified over an extended period of time by infrastructure (transmission lines), access tracks, exploration and mining activities (Rio Tinto, 2016). However, a larger area of similar, intact wetland dependant vegetation is located in drainage lines in the surrounding area (GIS Database). The clearing is considered to be at variance to Principle (f), although the clearing is not likely to significantly impact the ecological functions of watercourses in the surrounding area. Native vegetation clearing will not have a detrimental impact on vegetation types located in the area.

The application area falls within the following land systems; Boolgeeda, Newman, Platform, Calcrete, Egerton, Oakover, River, Spearhole and Wannamunna. The majority of the application area falls within the Wannamunna land system followed by the Platform land system (GIS Database). These land systems are not

generally prone to land degradation or soil erosion with the exception of the River land system which has a high to very high susceptibility to erosion if vegetation cover is removed. However, only a small portion of the application area falls within the River land system (2.58%) and it is unlikely that the clearing activities will cause or exacerbate land degradation (Rio Tinto, 2016; Van Vreeswyck, et al., 2004). It is unlikely that the clearing of a long, narrow corridor of 30 metres needed for the proposal will increase the likelihood of land degradation.

No Public Drinking Water Source Areas are located within or in the vicinity of the application area (GIS Database). It is unlikely that clearing required for the proposal will cause deterioration in the quality of surface or groundwater, including sedimentation, erosion, turbidity or eutrophication of water bodies on-site or off-site (GIS Database). Given the linear nature of the proposed clearing it is unlikely that the clearing will cause or exacerbate the incidence or intensity of flooding.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principle (f), is not likely to be at variance to Principles (a), (b), (c), (g), (h), (i) and (j), and is not at variance to Principles (d) and (e).

Methodology

CALM (2002)
DAA (2016)
DPaW (2016)
Government of Western Australia (2015)
Keighery (1994)
Mattiske (2008)
Rio Tinto (2016)
Van Vreeswyk, et al. (2004)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- TEC/PEC – Boundaries
- TEC/PEC – Buffer
- Threatened Fauna
- Threatened and Priority Flora

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

Comments

There is one determined native title claim (WC2011/006) over the application area (DAA, 2016). This claim has been determined by the Federal Court. One registered native title claim (WC2005/006) occurs over the application area (DAA, 2016). This claim has been registered by the National Native Title Tribunal on behalf of the claimant groups (DAA, 2016). 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*.

There is one registered Aboriginal site of significance within the application area (DAA, 2016). 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 7 November 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology

DAA (2016)

4. References

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 3 (PIL3 – Hamersley subregion) Department of Conservation and Land Management, Perth, Western Australia.

DAA (2016) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2 (Accessed 9 November 2016).

DPaW (2016). Florabase - the Western Australian Flora. Flora Species Search, Department of Parks and Wildlife, Western Australian Herbarium. http://florabase.dpaw.wa.gov.au/ (Accessed 21 November 2016).

Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Western Australian Department of Parks and Wildlife, Perth, Western Australia.

Keighery B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of Western Australia (Inc.). Nedlands, Western Australia.

Mattiske (2008) Flora and Vegetation on the Hope Downs 4 Mine Infrastructure Corridor. Unpublished report prepared for Pilbara Iron Pty Ltd, Perth, Western Australia.

Rio Tinto (2016) Desktop Flora, Vegetation and Fauna Habitat Assessment at Hope Downs 1 to Hope Downs 4, Native Vegetation Clearing Permit Supporting Report, September 2016. Rio Tinto Iron Ore, Perth, Western Australia.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) Technical Bulletin - An Inventory and Condition Survey of the Pilbara Region, Western Australia, No. 92. Department of Agriculture, Government of Western Australia, Perth, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department 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
DotEE	Department of the Environment and Energy, 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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T — **Threatened species:**
Published as Specially Protected under the *Wildlife Conservation Act 1950,* listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

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

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

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

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

VU — **Vulnerable species**

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

EX **Presumed extinct species**
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA **Migratory birds protected under an international agreement**
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD **Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS **Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P **Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 **Priority One - Poorly-known species:**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species:**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species:**
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

P4 **Priority Four - Rare, Near Threatened and other species in need of monitoring:**
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.