



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9102/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Nexus Pinnacles Pty Ltd

1.3. Property details

Property: Mining Lease 28/243
Miscellaneous Licence 28/41
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Pinnacles Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
70		Mechanical Removal	Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 17 December 2020

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: 20: Low woodland; mulga mixed with *Allocasuarina cristata* & *Eucalyptus* sp. (GIS Database).

A flora and vegetation survey was conducted over the application area by Native Vegetation Solutions (NVS) during August, 2020. The following vegetation associations were recorded within the application area (NVS, 2020):

- *Acacia burkittii* shrubland with emergent *Casuarina pauper*;
- *Eucalyptus salubris* thicket over sclerophyll shrubland;
- *Acacia burkittii* over *Maireana sedifolia* shrubland;
- *Eucalyptus stricklandii* woodland;
- *Eucalyptus lesouefii* woodland;
- Mulga Shrubland with emergent *Casuarina pauper*;
- *Casuarina pauper* over sclerophyll shrubland;
- *Acacia burkittii* thicket- drainage;
- *Eucalyptus salubris* woodland on rocky ironstone hills;
- *Casuarina pauper* over *Maireana sedifolia* shrubland;
- *Eucalyptus salubris* and *Eucalyptus salmonophloia* woodland over *Tecticornia disarticulate*;
- *Casuarina pauper* over chenopod shrubland; and
- *Eucalyptus salmonophloia* woodland.

Clearing Description Pinnacles Project.
Nexus Pinnacles Pty Ltd proposes to clear up to 70 hectares of native vegetation within a boundary of approximately 252.237 hectares, for the purpose of mineral production and associated activities. The project is located approximately 98 kilometres north-east of Kalgoorlie-Boulder, within the City of Kalgoorlie-Boulder.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
To
Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

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

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 East Murchison subregion of the Murchison Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). This subregion is characterised by internal drainage and extensive areas of elevated red desert sandplains with minimal dune development. Vegetation is dominated by Mulga Woodlands which is often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia* shrublands (CALM, 2002).

There have been numerous flora and vegetation surveys undertaken over the application area since 2010, however there has only been one recent survey undertaken within the last five years (NVS, 2020). A site visit of the survey area was carried out by NVS (2020) on 18th August 2020 to examine the flora and vegetation groups contained within the application area.

A total of 17 families, 28 genera and 68 species were recorded within the application area and its surrounds (NVS, 2020). Thirteen major vegetation groups were recorded in the survey area and are in a Degraded to Very Good condition (Keighery, 1994; NVS, 2020). Existing disturbance within the survey area is comprised of historic clearing for exploration (NVS, 2020). No unique or restricted vegetation communities were identified, and all vegetation types are common, widespread and well represented in the Eastern Murchison subregion (NVS, 2020).

The flora and vegetation surveys identified no Threatened or Priority flora, or Threatened or Priority Ecological Communities within the application area (NVS, 2020).

There were no weed species recorded within the application area (NVS, 2020). 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.

Three fauna habitat types were found within the application area (Terrestrial Ecosystems, 2020). All faunal habitats within the application area are considered to be common and widespread within the region and faunal assemblages are unlikely to be different to those found in similar habitat located elsewhere in the region (Terrestrial Ecosystems, 2020; GIS Database). The clearing of 70 hectares of native vegetation within the 252.237 hectare application area is unlikely to have a significant impact on faunal diversity in a regional and local context.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (NVS, 2020; 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)
NVS (2020)
Terrestrial Ecosystems (2020)

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 indigenous to Western Australia.

Comments

Proposal is not likely to be at variance to this Principle

A site visit was undertaken by Terrestrial Ecosystems (2020) on 18 August 2020 to assess fauna habitat types and condition in the project area. One-hundred and thirty seven habitat assessments were undertaken during the field assessment (Terrestrial Ecosystems, 2020).

The following three fauna habitats have been recorded within the application area (Terrestrial Ecosystems, 2020):

- Mixed mulga woodland;
- Mixed open Eucalypt woodland over open shrubs and scattered grass understorey; and
- *Casuarina pauper* over mixed shrubs and chenopods.

These fauna habitats are common and widespread in the local and regional area and the application area does not provide an important ecological linkage or faunal movement corridor (Terrestrial Ecosystems, 2020).

The drainage lines contain denser fauna habitat but it is typically too small to contain a unique fauna assemblage (Terrestrial Ecosystems, 2020).

No species of conservation significance were considered likely to utilise the application area or surrounds (Terrestrial Ecosystems, 2020). The Princess Parrot (*Polytelis alexandrae* - Priority 4) and Fork-tailed Swift (*Apus pacificus* – Migratory) may infrequently be seen in the region, however, clearing of vegetation is unlikely to have an impact on this species (Terrestrial Ecosystems, 2020).

The base of smooth-barked eucalypt trees were inspected for the presence of *Camponotus terebrans* which is known to be associated with the larvae of the Arid Bronze Azure Butterfly (Terrestrial Ecosystems, 2020). Trees were inspected and those that supported an ant colony similar to *Camponotus terebrans* were photographed and provided to Dr Brian Heterick of the Western Australian Museum. Dr Heterick identified the ants as a species of *Papyrius* (Dolichoderinae), perhaps *Papyrius nitidus* (Terrestrial Ecosystems, 2020). It is therefore considered highly unlikely that this butterfly is present in the application area.

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

Methodology Terrestrial Ecosystems (2020)

GIS Database:

- Imagery
- Pre-European Vegetation
- Threatened Fauna

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

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

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (NVS, 2020).

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

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

Methodology NVS (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 (NVS, 2020).

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

Methodology NVS (2020)

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 association 20: Low woodland; mulga mixed with *Allocasuarina cristata* & *Eucalyptus* sp. (GIS Database). Approximately 99% of the pre-European extent of this vegetation associations 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	28,120,587	28,044,823	~99	Least Concern	7.77
Beard vegetation associations – WA					
20	1,295,103	1,292,475	~99	Least Concern	19.38
Beard vegetation associations – Murchison Bioregion					
20	1,174,259	1,171,631	~99	Least Concern	15.49

* Government of Western Australia (2019)

** Department of Natural Resources and Environment (2002)

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

Methodology Department of Natural Resources and Environment (2002)
Government of Western Australia (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 (NVS, 2020; GIS Database). Several seasonal creek lines pass through the application area (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (BoM, 2020). The vegetation community, '*Acacia burkittii* thicket- drainage' is associated with creek lines in the application area.

Based on the above, the proposed clearing is at variance to this Principle. Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition.

Methodology BoM (2020)
NVS (2020)

GIS Database:
- Hydrography, Lakes
- Hydrography, linear

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

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

The application area lies within the Campsite, Illaara and Yilgangi 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 Campsite land system is described as 'Alluvial plains, supporting eucalypt woodlands with halophytic understoreys and acacia shrublands.' This land system is not generally susceptible to erosion (Payne et al., 1994).

The Illaara land system is described as 'Plains with ironstone gravel or calcrete mantles supporting eucalypt woodlands and mulga-casuarina shrublands.' This land system is not generally susceptible to erosion (Payne et al., 1994).

The Yilgangi land system consists of 'Low breakaways with saline gravelly lower plains supporting predominately halophytic low shrublands.' This land system is not generally susceptible to erosion (Payne et al., 1994).

The proposed clearing of up to 70 hectares of native vegetation within a boundary of approximately 252.237 hectares, for the purpose of mineral production and associated activities is unlikely to cause appreciable land degradation.

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

Methodology Payne et al. (1994)

GIS Database:
- Landsystem Rangelands
- Soils, Statewide

(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 Queen Victoria Spring Nature Reserve which is located approximately 72 kilometres east of the application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.

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

Methodology GIS Database:
- 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). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. 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 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 semi-arid, with a low average rainfall of approximately 266.1 millimetres per year (BoM, 2020). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (BoM, 2020).

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

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

Methodology BoM (2020)

GIS Database:

- Hydrographic Catchments - Catchments
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 23 November 2020 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application (DPLH, 2020). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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 is one registered Aboriginal Sites of Significance within the application area (DPLH, 2020). 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 (2020)

4. References

- BoM (2020) Bureau of Meteorology Website – Climate Data Online, Kalgoorlie-Boulder. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 14 December 2020).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 14 December 2020).
- 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. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- NVS (2020) Reconnaissance Flora and Vegetation Survey of the Pinnacles Project, August 2020. Unpublished report prepared for Nexus Minerals Ltd by Native Vegetation Solutions, October 2020.
- Pringle, S A. Gilligan, and A M E van Vreeswyk (1994) An inventory and condition survey of the north-eastern Goldfields, Western Australia. Technical Bulletin No. 87. Department of Agriculture, South Perth, Western Australia.
- Terrestrial Ecosystems (2020) Basic Vertebrate Fauna Survey, October 2020. Unpublished report prepared for Nexus Minerals Ltd by Terrestrial Ecosystems, October 2020.

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , 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
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , 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.