



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9110/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Lake Hillman Mining Pty Ltd

1.3. Property details

Property: Mining Lease 70/1370
Miscellaneous Licence 70/212
Local Government Area: Shire of Koorda
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 17 June 2021

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation association: 125: Bare areas; salt lakes (GIS Database).</p> <p>A flora and vegetation survey was conducted over part of the application area by Landform Research (Landform) on 24 October 2018. The following vegetation types were recorded within the application area (Landform, 2019):</p> <p>Chenopod Open Low Shrubland dominated by <i>Tecticornia</i>.</p> <p><i>Casuarina obesa</i> Low Open Woodland over Chenopod open low shrubland.</p>
Clearing Description	<p>Lake Hillman Mining Pty Ltd proposes to clear up to 98.54 hectares of native vegetation within a boundary of approximately 104.13 hectares, for the purpose of mineral production and associated activities. The project is located approximately 14.5 kilometres southwest of Koorda, within the Shire of Koorda.</p>
Vegetation Condition	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).</p> <p>to</p> <p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).</p>
Comment	<p>The vegetation condition was derived from a vegetation survey conducted by Landform (2019).</p> <p>The proposed clearing is for gypsum extraction.</p>

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 clearing permit application area is located within the Merredin subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Avon Wheatbelt Bioregion (GIS Database). The Merredin subregion is an area of active drainage, characterised by a gently undulating landscape of low relief (CALM, 2002). Proteaceous scrub-heaths, rich in endemics, occur on uplands and sandplains, while mixed *Eucalyptus*, *Allocasuarina huegeliana*, and Jam-York Gum woodlands occur on alluvials and eluvials (CALM, 2002). There is no connected drainage, and salt lake chains occur as remnants of ancient drainage systems that now only function in very wet years (CALM, 2002).

A flora and vegetation survey was conducted over part of the application area by Landform (2019) on 24 October 2018. The vegetation of the application area is dominated by *Tecticornia* species (Landform, 2019). No Threatened or Priority Ecological Communities were identified as potentially occurring within the application area and none of the vegetation types mapped and described are listed as Threatened or Priority Ecological Communities (GIS Database; Landform, 2019).

A total of 20 flora species from 15 genera and 10 families were recorded within the application area, including one invasive species (Landform, 2019). *Fitzwillia axilliflora* (P2) and *Angianthus micropodioides* (P3) were identified as potentially occurring within the application area based on suitable habitat (Landform, 2019). However, the flora survey did not identify any Priority flora species within the application area (Landform, 2019).

NatureMap identified 59 bird and one reptile species previously recorded within 10 kilometres of the application area (DBCA, 2007-). Two conservation significant fauna species were among the 60 fauna species recorded: Peregrine Falcon (*Falco peregrinus*, OS) and Western Spiny-tailed Skink (*Egernia stokesii badia*, VU at a state level and EN at a federal level) (DBCA, 2007-). However, neither species is likely to be significantly dependent on habitat within the application area.

The vegetation association, fauna habitat and landform types present within the application area, are well represented in surrounding areas (Landform, 2019; 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)
DBCA (2007-)
Landform (2019)

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**

No fauna surveys have been conducted over the application area. Based on aerial imagery and vegetation descriptions, there is one potential fauna habitat which could be described as Chenopod Open Low Shrubland (Landform, 2019). There are no large trees within the application area, with shrubland sparsely distributed (GIS Database; Landform, 2019). The application area is unlikely to be of significant value to any fauna species.

There are no known records of conservation significant fauna species within the application area (GIS Database). NatureMap did not identify any conservation significant species that are likely to utilise the application area for foraging or breeding habitat (DBCA, 2007-).

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

Methodology DBCA (2007-)
Landform (2019)

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 may be at variance to this Principle

There are no known records of Threatened flora within the application area (GIS Database).

There are population records of Threatened flora species *Frankenia conferta* located approximately 1.4 kilometres north and 6.2 kilometres south of the application area (GIS Database). Both population records are located on Lake Cowcowing (GIS Database). The flora survey of the application area did not identify *Frankenia conferta*, however the application area was not systematically searched for this species to confidentially rule out the absence of this species (DBCA, 2021; Landform, 2019; Landform, 2020).

DBCA (2021) reviewed known populations and specimen records of *Frankenia conferta* and identified that *Frankenia conferta* has been recorded on salt lake edges and within salt lakes, drainage lines and floodplains, often in areas where gypsum is present. The vegetation recorded within the application area is considered suitable habitat for this species (DBCA, 2021; Landform, 2019).

Given the close proximity of verified populations of *Frankenia conferta* and the presence of suitable habitat, it is considered highly possible that *Frankenia conferta* may occur within the application area (DBCA, 2021). As there has been no systematic targeted survey over the application area to rule out the presence or absence of *Frankenia conferta*, the proposed impacts are unknown as the species has the potential to be present within the application area (DBCA, 2021). Based on the known records of the species on Lake Cowcowing and in the uncertainty of the presence of this species, the proposed clearing of suitable habitat is unlikely to significantly impact on the current population of *Frankenia conferta* (GIS Database; DBCA, 2021).

Based on the above, the proposed clearing may be at variance to this Principle. Potential impacts to Threatened flora as a result of the proposed clearing may be minimised by a Section 40 Authorisation granted under the *Biodiversity and Conservation Act 2016*. This would allow for the lawful taking or disturbance of Threatened flora if *Frankenia conferta* is present.

Methodology DBCA (2021)
Landform (2019)
Landform (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 (Landform, 2019).

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

Methodology Landform (2019)

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 may be at variance to this Principle

The application area falls within the Avon Wheatbelt Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 18% of the pre-European vegetation still exists in the IBRA Avon Wheatbelt Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 125: Bare areas; salt lakes (GIS Database). Approximately 90% of the pre-European extent of this vegetation association remains uncleared at a state level, and 9% remains uncleared at both a bioregional and subregional level (Government of Western Australia, 2019).

Beard vegetation association 125 describes the application area as bare, however there is sparse Chenopod and samphire shrubland across the application area (GIS Database; Landform, 2019).

Beard vegetation association 125 is listed as 'endangered' within the Avon Wheatbelt bioregion, however it is listed as 'least concern' at a state level. The application area represents approximately 0.6% of the current extent of Beard vegetation association 125 within the Avon Wheatbelt (Department of Natural Resources and Environment, 2002). The application area is not part of a significant remnant of vegetation or an ecological linkage to surrounding areas (GIS Database). The proposed clearing is unlikely to significantly reduce vegetation association 125 within the Avon Wheatbelt

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Avon Wheatbelt	9,517,109	1,761,187	~18	Vulnerable	2.42
IBRA Subregion - Merredin	6,524,180	1,367,565	~20	Vulnerable	2.54
Local Government - Koorda	283,084	40,493	~14	Vulnerable	2.30
Beard vegetation association – WA					
125	3,485,785	3,146,487	~90	Least Concern	9.29
Beard vegetation association – Avon Wheatbelt Bioregion					
125	167,448	16,289	~9	Endangered	20.04
Beard vegetation association - Merredin Subregion					
125	148,564	13,642	~9	Endangered	16.48

* Government of Western Australia (2019)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing may be 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

The proposed clearing is situated on a gypsum ridge, elevated from the ephemeral salt lake bed of Lake Cowcowing (Landform, 2019; GIS Database). Lake Cowcowing is dry for most the year, with small inundation events likely to occur following significant rainfall.

Given that the application area is located within a lake system, the proposed clearing will impact vegetation growing in association with a wetland. Lake Cowcowing is approximately 15,000 hectares and is not listed as a conservation significant wetland, with the majority of the lake vegetation undisturbed (GIS Database). There are no mature trees or other significant riparian vegetation located within the application area (GIS Database; Landform, 2019).

Based on the above, the proposed clearing is at variance to this Principle. However, the proposed clearing is unlikely to have a significant impact on the representation of riparian vegetation.

Methodology Landform (2019)

GIS Database:
- Hydrography, Lakes
- Hydrography, linear
- Imagery

(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 primarily consists of highly saline, alkaline gypsum soils (Landform, 2019). Excavation of the gypsum within the application area will consist of progressive removal of the gypsum mound (Landform, 2019). Vegetation cover of the application varies from 5-15%, removal of this vegetation cover is unlikely to result in significant soil erosion from rainfall or wind (Landform, 2019).

The proposed clearing is unlikely to cause appreciable land degradation. Previous excavation on Lake Cowcowing suggests that gypsum mining is unlikely to result in appreciable land degradation and that vegetation successfully establishes within areas cleared (Landform, 2019).

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

Methodology Landform (2019)

(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 Dukin Nature Reserve which is located approximately 2.3 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). The application area is situated on an elevated gypsum ridge on the ephemeral salt lake bed of Lake Cowcowing (GIS Database; Landform 2019). Excavation of gypsum within the application area will result in small areas of deeper pools following rainfall events, however this is unlikely to result in significant changes to surface water flows (Landform, 2019).

Previous gypsum excavation on Lake Cowcowing has not lead to an increase in salinity (Landform, 2019). 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 Landform (2019)

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 an average rainfall of approximately 315.6 millimetres per year (BoM, 2021). There are no permanent watercourses or waterbodies within the application area (GIS Database). The application area is part of the Lake Cowcowing system, which is a chain of ephemeral salt lakes (Landform, 2019; GIS Database). 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 (2021)
Landform (2019)

GIS Database:

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

Comments

The clearing permit application was advertised on 25 January 2021 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC2000/007) over the area under application (DPLH, 2021). 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 are no registered Aboriginal Sites of Significance within the application area (DPLH, 2021). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

Methodology DPLH (2021)

4. References

- BoM (2021) Bureau of Meteorology Website – Climate Data Online, Bencubbin. Bureau of Meteorology.
<http://www.bom.gov.au/climate/data/> (Accessed 2 June 2021).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions.
<https://naturemap.dbca.wa.gov.au/> (Accessed 14 June 2021).
- DBCA (2021) Advice received in relation to Clearing Permit Application CPS 9110/1. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, May 2021.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.
<https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 17 May 2021).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.
<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.
- Landform (2019) Flora and Vegetation Assessment – In support for Clearing Permit. M70/1370, L70/183 and L70/212 Lake Cowcowing. Report prepared by Landform Research, for Lake Hillman Mining Pty Ltd, November 2019.
- Landform (2020) Comments on *Frankenia* species at Lake Cowcowing - M70/1370. Report prepared by Landform Research, for Lake Hillman Mining Pty Ltd, November 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.