

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8050/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hastings Technology Metals Ltd

1.3. Property details

Property: General Purpose Lease 09/14

General Purpose Lease 09/16

Mining Lease 09/157

Miscellaneous Licence 09/70 Miscellaneous Licence 09/81 Shire of Upper Gascoyne

Yangibana Rare Earths Project

Local Government Area: Colloquial name:

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing

Mechanical Removal Access Roads, Accommodation Camp and Laydown

Areas

For the purpose of:

1.5. Decision on application

Decision on Permit Application:

Decision Date:

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 associations:

18: Low woodland; mulga (Acacia aneura); and

165: Low woodland; mulga & snakewood (Acacia eremaea) (GIS Database).

A level 2 flora and vegetation survey was undertaken over the application area by Ecoscape (Australia) Pty Ltd (Ecoscape) during 11 to 24 May 2015, and then again 4 to 15 August 2015. The following seven vegetation associations were recorded within the application area (Ecoscape, 2015):

AcAc - Acacia curryana, Senna artemisioides subsp. helmsii and Eremophila exilifolia mid sparse shrubland over Aristida contorta and Eriachne pulchella subsp. dominii low grassland;

AcEt - Acacia cyperophylla var. cyperophylla low open woodland over Eragrostis tenellula, Eragrostis cumingii and Eriachne aristidea low tussock grassland;

AxECAC - Acacia xiphophylla, A. synchronicia and A. macraneura low open woodland over Eremophila cuneifolia, Senna artemisioides subsp. oligophylla, S. glutinosa subsp. x luerssenii mid open shrubland over Aristida contorta and Enneapogon caerulescens low sparse tussock grassland;

EcMgCc - Eucalyptus camaldulensis mid woodland over Melaleuca glomerata and Acacia coriacea subsp. pendens tall shrubland over *Cenchrus ciliaris mid tussock grassland;

EeAc - Eremophila exilifolia, Acacia tetragonophylla and A. kempeana mid open shrubland over Aristida contorta and Eriachne pulchella subsp. dominii low sparse tussock grassland;

EpAc - Eremophila phyllopoda subsp. obliqua, Acacia tetragonophylla and Senna artemisioides subsp. Helmsii mid open shrubland over Aristida contorta, Eriachne pulchella subsp. dominii and Portulaca oleracea low grassland/forbland; and

Fs - Frankenia setosa, Sclerolaena medicaginoides and Maireana georgei low open shrubland.

*denotes weed species.

Clearing Description

Yangibana Rare Earths Project.

Hastings Technology Metals Ltd proposes to clear up to 69 hectares of native vegetation within a boundary of approximately 509 hectares, for the purpose of access roads, accommodation camp and laydown areas. The project is located approximately 160 kilometres south-west of Paraburdoo, within the Shire of Upper Gascoyne.

Vegetation Condition

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

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment

The vegetation condition was derived from a vegetation survey conducted by Ecoscape (2015).

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 Augustus subregion of the Interim Biogeographic Regionalisation for Australia Gascoyne Bioregion (GIS Database). The Augustus subregion is characterised by Mulga woodland with *Triodia* occurring on shallow stony loams on rises, while the shallow earthy loams over hardpan on the plains are covered by Mulga parkland (CALM, 2002).

A Level 2 flora and fauna survey was undertaken by Ecoscape (2015) over the application area, which was part of a larger Yangibana study area (55,000 hectares) (Ecoscape, 2015; Hastings, 2018). No Threatened Flora species, Threatened or Priority Ecological Communities were identified within the application area (Ecoscape, 2015). One Priority Flora species, *Acacia curryana* (Priority 1) was identified within the application area. Ecoscape (2015) surveyed approximately 50 individuals, which represents 1.87% of all the plants recorded within the Yangibana study area (2,669 plants) (Ecoscape 2015, Hastings, 2018). The proposed clearing is unlikely to impact the conservation significance of this Priority Flora species.

There were seven vegetation types identified within the application area, which are common within the local and regional area, with the exception of EcMgCc, which is identified as a Groundwater Dependent Ecosystem (Ecoscape, 2015).

The vegetation within the application area was surveyed to be in a degraded to excellent condition (Keighery, 1994), with areas degraded as a result of pastoral and exploration activities (Ecoscape 2015).

There were five faunal habitats identified within the application area (Ecoscape, 2016). The habitats are common within the regional area, however the Major River habitat type has an elevated conservation (Ecoscape, 2015).

Several weed species were identified within the application area (Ecoscape, 2015). Care must be taken to ensure that the proposed clearing activities do not spread or introduce weed species to non-infested areas. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

Methodology

CALM (2002)

Ecoscape (2015)

Ecoscape (2016)

Hastings (2018)

GIS Database:

- IBRA Australia

(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 level 2 fauna survey was undertaken by Ecoscape, which comprised of a two-phase trapping survey during in Autumn (11 to 24 May 2015) and Spring (22 September to 2 October 2015) (Ecoscape, 2016). There were five faunal habitats identified during the survey;

- Granite Outcrop;
- Major River;
- Minor Creekline;
- Rocky Plains and Hills; and
- Sandy Plains (Ecoscape, 2016).

The Rocky Plains was the most widespread habitat type, followed by the Sandy Plains (Ecoscape, 2016). The Granite Outcrop, Major River and Minor Creekline faunal habitats were recorded from isolated areas of smaller

extent, however all habitat types were also recorded from the wider region (Ecoscape, 2016). The Major River and Minor River habitat type can proviide faunal habitat of a moderate range of microhabitats, primarily with logs and tree hollows. Approximately 0.70 hectares of the Major River habitat type and approximately 22 hectares of the Minor River habitat is mapped within the application area (Ecoscape, 2015). Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition.

Ecoscape (2016) recorded 134 species within the application, which included 20 species of mammal (12 species of non-volant mammals, eight species of bat), 85 species of bird, 25 species of reptile and four species of amphibian. There were two species of conservation significance recorded from within the application area: the Longtailed Dunnart (*Sminthopsis longicaudata*) (Priority 4) and historical mounds of the Western Pebblemound Mouse (*Pseudomys chapmani*) (Priority 4) (Ecoscape, 2016). The Western Pebble-mound Mouse mounds were identified to be older than 50 years, and there was no other evidence indicating that this species occurs within the application area (Ecoscape, 2016). The Longtailed Dunnart could potentially use the application area and adjoining areas for foraging; however given the high mobility of these species, it is not likely that the proposed clearing will significantly impact the conservation significance of this species.

Trapping for Short-range Endemics (SRE) was conducted in Autumn 2015, following significant rainfall events (Ecoscape, 2016). Ecoscape (2016) identified 13 taxa, which are potential SRE species, however no SRE species of conservation significance were recorded within the application area.

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

Methodology Ecoscape (2016)

(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 (Ecoscape, 2015).

The vegetation associations within the application area are common and widespread within the region (Ecoscape, 2015; 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 Ecoscape (2015)

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

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 (Ecoscape, 2015).

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

Methodology Ecoscape (2015)

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 areas fall within the Gascoyne Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). The vegetation within the application areas is recorded as:

18: Low woodland; mulga (Acacia aneura); and

165: Low woodland; mulga & snakewood (Acacia eremaea) (GIS Database).

The above Beard vegetation associations retain approximately 99% or above of their pre-European extent at both the state and bioregion level (Government of Western Australia, 2018). The areas proposed to be cleared are not a significant remnant of native vegetation.

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

Methodology Government of Western Australia (2018)

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 is one permanent watercourse and several ephemeral drainage lines that intersect the application area (GIS Database). Based on vegetation mapping by Ecoscape (2015), there are two vegetation types identified as riparian vegetation:

- 1. **AcEt -** Acacia cyperophylla var. cyperophylla low open woodland over Eragrostis tenellula, Eragrostis cumingii and Eriachne aristidea low tussock grassland; and
- 2. **EcMgCc** *Eucalyptus camaldulensis* mid woodland over *Melaleuca glomerata* and *Acacia coriacea* subsp. *Pendens* tall shrubland over **Cenchrus ciliaris* mid tussock grassland.

The vegetation type EcMgCc is considered to represent a Groundwater Dependent Ecosystem (GDE), and vegetation type AcEt may also represent a potential GDE due to the presence of *Eucalyptus victrix* (Ecoscape, 2015).

These vegetation types are likely to provide important habitat for fauna, as the vegetation can provide faunal habitat of a moderate range of microhabitats with logs, leaf litter and tree hollows (GIS Database). The proposed clearing is likely to have some impact to the riparian vegetation. Approximately 0.70 hectares of EcMgCC is mapped within the application area, which if cleared, represents a cumulative impact of 0.20% of its mapped extent within the study area (Ecoscape, 2015; Hastings, 2018). Approximately 22 hectares of AcEt is mapped within the application area, which if cleared, represents a cumulative impact of 1.23% of its mapped extent within the study area (Ecoscape, 2015; Hastings, 2018). The design and location of the access road extension is unlikely to impede natural water drainage and will not result in additional sediment loads during heavy rainfall events (Hastings, 2018).

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

Ecoscape (2015) Hastings (2018)

GIS Database:

- 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 lies within the Gascoyne, Glenburgh, James, Nadarra and Phillips 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 Gascoyne land system consists of river plains with grassy woodlands and tussock grassland. This land system may be susceptible to erosion if vegetation cover is removed (Payne et al., 1987).

The Glenburgh land system consists of rugged granite hills, stony uplands and lower plains supporting scattered tall shrublands of mulga and other acacias (Payne et al., 1987).

The James land system is described as low hills, ridges and tors of granite and quartz. Stone lower plains, rises and drainage floors are scattered with tall shrublands of mulga and other acacias (Payne et al., 1987).

The Nadarra land system consists of plains and calcrete rises, with chenopod shrublands and hard spinifex grasslands (Payne et al., 1988).

The Phillips land system consists of low hills and undulating uplands of crystalline rocks supporting mulga and

other acacia-dominated tall shrubs. This land system may be susceptible to erosion if vegetation cover is removed (Payne et al., 1987).

The majority of the land systems are protected by stony mantles, however may be susceptible to erosion if the surface is disturbed. Due to the lack of stony surface mantles, the Gascoyne land system may be particularly susceptible to erosion if disturbed.

The proposed clearing of up to 69 hectares of native vegetation within a boundary of approximately 509 hectares 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. (1987) Payne et al. (1988)

GIS Database:

- Landsystem Rangelands

(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 Mount Augustus National Park, which is located approximately 66 kilometres south-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

The application area is not located within a Public Drinking Water Source Area (GIS Database). The application areas are located within the proclaimed Gascoyne groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

The annual evaporation rate exceeds the annual average rainfall for the local area (BOM, 2018; GIS Database). Any surface water within the application areas are likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

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 BOM (2018)

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 region experiences a desert climate, with bimodal rainfall, with an average rainfall of approximately 225.7 millimetres per year (BOM, 2018; CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (GIS Database).

There is one permanent water course 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. The access road extension has been designed to take account of drainage flow patterns during flood events, and the proponent will use culverts and floodways will be placed to ensure water flow is not obstructed (Hastings, 2018)

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

Methodology

BOM (2018) CALM (2002) Hastings (2018)

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 14 May 2018 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, 2018). 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, 2018). 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.

The Yangibana Rare Earths Project is currently under formal assessment of the EPA however, on 23 March 2018, the EPA decided that preliminary works inclusive of this proposal would be acceptable to be carried out. The EPA stated that considering the limited nature of clearing, the need for further investigations and the constraints on the temporary camps due to seasonal weather, the proposed works are considered justified in their extent and timing. Pursuant to section 41 A(3) of the *Environmental Protection Act 1986* the EPA consents to Hastings Technology Metals Limited undertaking minor or preliminary works within the assessed development envelope for the purposes of construction of an access road from the accommodation camp to the process plant, borrow pits and associated truck maintenance upgrades, and rehabilitation works (EPA, 2018).

Methodology

DPLH (2018) EPA (2018)

4. References

BoM (2018) Climate Statistics for Australian Locations. A Search for Climate Statistics for Mount Phillip, Australian Government Bureau of Meteorology, viewed 7 June 2018,

http://reg.bom.gov.au/climate/averages/tables/cw_007058.shtml.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 7 June 2018).

Ecoscape (2015) Yangibana Project Biological Assessment: Flora and Vegetation. Report prepared for Hastings Rare Metals Ltd, by Ecoscape (Australia) Pty Ltd, December 2015.

Ecoscape (2016) Yangibana Project Biological Assessment: Terrestrial Fauna. Report prepared for Hastings Rare Metals Ltd, by Ecoscape (Australia) Pty Ltd, November 2016.

EPA (2018) Notice of decision to consent to Minor or Preliminary Works, Environmental Protection Authority http://www.epa.wa.gov.au/sites/default/files/minor_and_preliminary/Notice%20of%20decision%20to%20consent%20t o%20minor%20or%20preliminary%20works%20%28s41A%283%29%29.pdf (Accessed 7 June 2018).

Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Hastings (2018) Yangibana Rare Earths Project – Preliminary or Minor Works Native Vegetation Clearing Permit Application Assessment Information. Hastings Technology Metals Limited, 2018.

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

Payne, A.L., Mitchell, A. A., & Holman, W.F (1988) An Inventory and Condition Survey of the Rangelands in the Ashburton River Catchment, Western Australia. Department of Agriculture, Western Australia.

Payne, A.L., Spencer, G.F., & Curry, P.J (1987) An Inventory and Condition Survey of the Rangelands in the Carnarvon Basin, Western Australia. Department of Agriculture, Western Australia.

5. Glossary

Acronyms:

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)

DBCA Department of Biodiversity Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DEE Department of the Environment and Energy, Australian Government
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)

DPIRD Department of Primary Industries and Regional Development, Western Australia

DPLH Department of Planning, Lands and Heritage, Western Australia

DRF Declared Rare Flora

DoE Department of the Environment, Australian Government (now DEE)

DoW Department of Water, Western Australia (now DWER)

DPaW Department of Parks and Wildlife, Western Australia (now DBCA)

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DEE)

DWER Department of Water and Environmental Regulation, Western Australia

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 (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 1950*.

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 1950*.

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.