Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6404/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Ramelius Resources Ltd**

1.3. Property details

Property: Mining Leases 36/266, 36/365, 36/375, 36/441, 36/460
Local Government Area: Shire of Leonora
Colloquial name: Kathleen Valley Mining Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 April 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations have been mapped within the application area (GIS Database):

18: Low woodland; Mulga (*Acacia aneura*); and
39: Shrublands; mulga scrub.

Mattiske Consulting Pty Ltd (2012) conducted a flora survey of the application area and surrounding areas between 18 to 19 January 2012, and 16 to 18 July 2012, and described six vegetation communities of the application area:

A8 - Open woodland of *Acacia aneura* var. *aneura* and *Acacia incurvaneura* over *Ptilotus obovatus* var. *obovatus*, *Solanum lasiophyllum*, *Senna artemisioides* and *Eremophila galeata* over *Aristida contorta*, *Aristida holathera* var. *holathera* and *Enneapogon caerulescens* on drainage lines with red-brown clay soils.

A9 - Open woodland of *Acacia aneura* var. *aneura*, *Acacia incurvaneura* and *Santalum lanceolatum* over *Scaevola spinescens*, *Enchylaena tomentosa* var. *tomentosa* and *Sida calyxhymenia* over *Enneapogon caerulescens* on flats with pale brown sandy-loam soils with quartz outcropping and pebbles.

S3 - Low Shrubland of *Hakea lorea* over *Eremophila oldfieldii* subsp. *angustifolia*, *Hakea preissii*, *Ptilotus obovatus* var. *obovatus* and *Scaevola spinescens* over *Enneapogon polyphyllus* on flats with red/brown clay soils and ironstone and quartz pebbles.

S9 - Low Shrubland of *Calytrix desolata* with scattered *Acacia burkittii* and *Eremophila galeata* over *Aristida contorta* on midslopes and outcrops with red/brown clay soils with ironstone pebbles.

S10 - Low Shrubland of *Ptilotus obovatus* var. *obovatus* with scattered *Eremophila galeata*, *Solanum lasiophyllum* and *Sclerolaena* spp. over *Aristida contorta* on flats to undulating terrain with red/brown clay/loam soils and quartz pebbles.

S11 - Low Shrubland of *Acacia burkittii* and *Eremophila galeata* over *Ptilotus obovatus* var. *obovatus* and *Maireana tomentosa* var. *tomentosa* over *Aristida contorta* on slopes with red/brown clay/loam soils with occasional quartz and ironstone pebbles.

D - Degraded areas

Clearing Description

Kathleen Valley Mining Project.

Ramelius Resources proposes to clear up to 160.7 hectares of native vegetation within a total boundary area of approximately 160.738 hectares for the purposes of New Open Pit, WRL, ROM Pad, Magazine, Workshop, Offices, Haul and Access Roads. The proposal is located approximately 44 kilometres north-west of Leinster in the Shire of Leonora.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);

To

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

Comment The vegetation condition was assessed by botanists from Mattiske Consulting Pty Ltd (2012).

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 (MUR1) subregion of the Murchison Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by its internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development. Salt lake systems associated with the occluded Paleodrainage system. Broad plains of red-brown soils and breakaway complexes as well as red sandplains. Vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia* shrublands (CALM, 2002).

The vegetation within the application area consists of Beard vegetation associations 18 and 39, which are common and widespread throughout the Murchison bioregion with approximately 100% of the pre-European vegetation extent remaining (Shepherd, 2009; GIS Database). A search of the Department of Parks and Wildlife Declared Rare and Priority Flora databases revealed that no Declared Rare Flora (DRF) species and ten Priority species may potentially occur within a 20 kilometre radius of the application area (DPAW, 2015).

A vegetation survey by Mattiske Consulting Pty Ltd (2012) of the application area and surrounding vegetation was undertaken between 18 to 19 January 2012, and 16 to 18 July 2012. These surveys identified 86 species of flora taxa, from 56 genera, belonging to 26 families. Mattiske Consulting Pty Ltd (2012) identified six vegetation communities within the application area, with the condition of these vegetation types ranging from 'pristine' to 'very good' (Keighery, 1994). Mattiske Consulting Pty Ltd (2012) identified no DRF or Priority flora species within the application area. One Priority Flora species, *Grevillea inconspicua* (P4), was recorded in three populations, all of which occur outside the proposed clearing area (Mattiske Consulting Pty Ltd, 2012).

No Threatened Ecological Communities were recorded or identified within the application area (GIS Database). The application area sits within the buffer zone of the Priority Ecological Community: Violet Range vegetation complexes (banded ironstone formation) which is described as "All vegetation units associated with the BIF and BIF outwash geology of the Perseverance Greenstone Belt range of east of the Violet Range". The flora survey identified no vegetation complexes resembling the Violet Range vegetation complexes (Mattiske Consulting Pty Ltd, 2012). According to Ramelius Resources (2015a), units forming the sedimentary sequence of the Perseverance Greenstone Belt are the felsic tuff/sediments containing shale/chert/BIF layers and interbedded with basalt and komatiitic ultramafic units. These units occur as a NNW trending sequence, with the margin located around 500 metres or greater to the east of, and sub-parallel to, the M36/375 tenement (Ramelius Resources, 2015a).

Eight weed species were identified during the surveys: *Cenchrus ciliaris* (Buffell Grass); *Eragrostis curvula* (African Lovegrass); *Portulaca oleracea* (Purslane); *Vicia monantha* (Squarestem Vetch); *Tribulus terrestris* (Caltrop); *Lysimachia arvensis* (Pimpernel); *Solanum nigrum* (Black Berry Nightshade); and *Citrullus lanatus* (Pie Melon) (Mattiske Consulting Pty Ltd, 2012). None of these species are listed by the Western Australian Department of Agriculture and Food as Declared Plants. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

A fauna survey has been undertaken over the entire application area by Ninox Wildlife Consulting (2012), during 11 to 14 February 2012. The fauna habitats within the application area are considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (Ninox Wildlife Consulting, 2012). There were no habitat types of high ecological significance. The clearing of 160.7 hectares of native vegetation is unlikely to have a significant impact in a regional and local context.

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

Methodology

CALM (2002)
DPAW (2015)
Keighery (1994)
Mattiske Consulting Pty Ltd (2012)
Ninox Wildlife Consulting (2012)
Ramelius Resources (2015a)
Shepherd (2009)
GIS Database:
- IBRA WA (Regions - Sub Regions)

- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

(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 may be at variance to this Principle

A level 1 fauna survey has been undertaken over the entire application area by Ninox Wildlife Consulting (2012), between 11 to 14 February 2012 (Ninox Wildlife Consulting, 2012): Four fauna habitats were identified:

- Open Shrublands of Mulga over primarily *Acacia* sp. and *Eremophila* sp. on stony flat clay soils.
- Tall Mulga drainage lines and minor drainage lines on silty clays.
- Rocky rises of *Acacia* sp. and *Eremophila* sp. shrubland on rocky rises.
- Highly degraded areas (old mine workings, adits, mine shafts – only showing major areas of degradation).

The landforms and habitat found within the application area is considered as being well represented in the bioregion (Ninox Wildlife Consulting, 2012; Mattiske Consulting Pty Ltd, 2012). The application area does contain habitats or faunal assemblages that are ecologically significant such as the 'Tall Mulga drainage lines and minor drainage lines on silty clays' habitat type. Given the presence of locally significant habitat types such as the drainage lines, local fauna species are likely to be impacted by the proposed clearing of 160.7 hectares of native vegetation.

There is approximately 99% of the pre-European vegetation remaining within the Murchison bioregion (Government of Western Australia, 2013; GIS Database). Given the extent of the native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent a significant ecological link.

There were no conservation significant fauna species listed as either Threatened Species under the *Environment Protection and Biodiversity Conservation Act 1999* or protected under Western Australian legislation (*Wildlife Conservation Act, 1950*), that may potentially occur within a 10 kilometre radius of the application area (DPAW, 2015). Ninox Wildlife Consulting (2012) conducted a level one fauna survey of the application area between 11 to 14 February 2012, and recorded no species of conservation significance. Fresh tracks of the Australian Bustard (*Ardeotis australis*) were noted; however, this species is highly mobile and has a wide distribution and therefore the proposed clearing is unlikely to significantly impact this species.

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

Methodology

DPAW (2015)
Government of Western Australia (2013)
Mattiske Consulting Pty Ltd (2012)
Ninox Wildlife Consulting (2012)
GIS Database:
- IBRA WA (regions – subregions)
- Pre-European Vegetation

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

Comments

Proposal is not likely to be at variance to this Principle

According to available databases, there are no records of Declared Rare Flora (DRF) within the application area (GIS Database). A search of the Department of Parks and Wildlife Declared Rare and Priority Flora databases identified no DRF species as occurring within a 20 kilometre radius of the application area (DPAW, 2015).

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

Methodology

DPAW (2015)
Mattiske Consulting Pty Ltd (2012)
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 (TEC's) located within a 100 kilometre radius of the application area (GIS Database).

Surveys of the application area did not identify any Threatened Ecological Communities (Mattiske Consulting Pty Ltd, 2012).

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

Methodology Mattiske Consulting Pty Ltd (2012)
GIS Database:
- Threatened Ecological Sites Buffered

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments

Proposal is not at variance to this Principle

The area applied to be cleared is located within the Murchison IBRA bioregion, with the majority of the application areas broadly mapped as falling within the Pilbara Bioregion (GIS Database). There is approximately 99% of Pre-European vegetation remaining within both of these bioregions (Government of Western Australia, 2013). The vegetation of the application area is classified predominantly as Beard vegetation associations: 18 - Low woodland; Mulga (*Acacia aneura*); and 39 - Shrublands; mulga scrub. These vegetation associations remain at approximately 99% of pre- European extent in the state and 99% in the bioregions (Government of Western Australia, 2013). Hence, the vegetation proposed to be cleared does not represent a significant remnant of vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPAW Managed Lands
IBRA Bioregion - Murchison	28,120,587	28,044,823	~99	Least Concern	7.7
Beard vegetation associations - State					
18	19,892,305	19,843,727	~99	Least Concern	6.29
39	6,613,569	6,602,580	~99	Least Concern	12.11
Beard vegetation associations - Bioregion					
18	12,403,172	12,363,252	~99	Least Concern	4.96
39	1,148,400	1,138,065	~99	Least Concern	3.58

* Government of Western Australia (2013)
** 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 (2013)
GIS Database:
- IBRA WA (regions – subregions)
- 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 may be at variance to this Principle

According to available GIS Databases, there are no permanent watercourses within the application area, however, there are several minor, non-perennial watercourses within the application area (GIS Database).

Based on vegetation mapping by Mattiske Consulting Pty Ltd (2012), there is one vegetation type associated with a watercourse:

- A8 - Open woodland of *Acacia aneura* var. *aneura* and *Acacia incurvaneura* over *Ptilotus obovatus* var. *obovatus, Solanum lasiophyllum, Senna artemisioides* and *Eremophila galeata* over *Aristida contorta, Aristida holathera* var. *holathera* and *Enneapogon caerulescens* on drainage lines with red-brown clay soils.

In the Murchison region where there is active drainage, scattered trees of *Eucalyptus camaldulensis* and *Casuarina obesa* appear in the mulga, and they also line the drainage channels (Beard, 1990). The absence of *Eucalyptus camaldulensis* and *Casuarina obesa* in drainage lines found in the application area suggests that they are minor channels which remain dry for most of the year, only flowing intermittently after significant rainfall associated with cyclones and storms (Mattiske Consulting Pty Ltd, 2012).

The region has a high average annual evaporation rate of approximately 3,600 -3,800 millimetres which is

significantly higher than its average annual rainfall of approximately 261 millimetres (BoM, 2015). Based on this, the watercourses within the application area would only be expected to carry water during high rainfall events as during normal rainfall events surface water is either quickly utilised by vegetation or lost to evaporation.

Based on the above, the proposed clearing may be at variance to this Principle. Management measures which address drainage diversion will be implemented through the Mining Proposal assessment under the *Mining Act 1978*.

Methodology Beard (1990)
BoM (2015)
Mattiske Consulting Pty Ltd (2012)
GIS Database:
- Evaporation Isopleths
- 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**
According to available databases, the application area is comprised of the Violet land system (GIS Database). This land system is characterised by undulating stony and gravelly plains and low rises, supporting mulga shrublands (Pringle et al., 1994). Abundant mantles provide effective protection against soil erosion over most of this land system, except where the soil surface has been disturbed. In such circumstances, the soil becomes moderately susceptible to water erosion. Narrow drainage tracts are mildly susceptible to water erosion (Pringle et al., 1994).

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

Methodology Pringle et al. (1994)
GIS Database:
- Rangeland Land System Mapping

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The proposed clearing is not located within a conservation reserve (GIS Database). The nearest conservation area is the Wanjarri Nature Reserve (A Class Reserve), which is located approximately 5 kilometres north-east of the application area (GIS Database).

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

Methodology GIS Database:
- DEC 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 (PDWSA) (GIS Database).

There are no permanent watercourses or wetlands within the application area (GIS Database). There are several ephemeral drainage lines that pass through the application area (GIS Database). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (Mattiske Consulting Pty Ltd, 2012). These creek lines are typical throughout the wider region and clearing is not likely to interrupt water flow on a larger regional scale (Mattiske Consulting Pty Ltd, 2012).

Ramelius Resources (2014) will undertake water management procedures including diversion channels/bunds, culverts, drains and spillways that will be designed for a 1:100 year peak flow event to minimise impacts to surface water flow. Large stretches of the application area are required for haul and access roads, and these will cross several ephemeral drainage lines. A combined culvert / floodway type crossing will be used for the pit to waste dump haul road crossing, and topsoil dump crossing. At the completion of the project these will be removed (Ramelius Resources, 2014). Surface water channel road crossings will also be utilised as low impact floodway crossings. These are not intended as all weather, long-term crossings and rain events which result in creek flows will also stop mining and ore haulage activities for at least 24 hours (Ramelius Resources, 2014).

The application area lies within a low rainfall zone and any surface water within the application area is likely to only remain for short periods following significant rainfall events (BoM, 2015). The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

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

Methodology BoM (2015)
Mattiske Consulting Pty Ltd (2012)
Ramelius Resources (2014)
GIS Database:
-Hydrography, Linear
- Public Drinking Water Source Areas (PDWSAs)

(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 application area is located within the Lake Carey catchment area (GIS Database). Given the size of the area to be cleared (160.7 hectares) in relation to the size of the catchment area (11,378,213 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.

The application area experiences an arid climate with mainly winter rainfall, with an annual average rainfall of approximately 261 millimetres per year (CALM, 2002; BoM, 2015). Based on an average annual evaporation rate of 3,600 - 3,800 millimetres (GIS Database), any surface water resulting from rainfall events is likely to be relatively short lived.

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

Methodology BoM (2015)
CALM (2002)
GIS Database:
- Evaporation Isopleths
- Hydrographic Catchments - Catchments

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

Comments

There is one Native Title Claim (WC1999/008) over the area under application (GIS Database). This claim has been determined by the Federal Court of Australia. 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*.

According to available databases there are several Aboriginal Sites of Significance located within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no sites of Aboriginal significance are damaged though the clearing process.

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

The clearing permit application was advertised on 23 February 2015 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT
- Native Title Claims - Filed at the Federal Court
- Native Title Claims - Determined by the Federal Court

4. References

Beard (1990) Plant Life of Western Australia. Kangaroo Press, Kenthurst NSW.

BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Leinster, Australian Government Bureau of Meteorology, viewed 30 March 2015, <http://www.bom.gov.au/climate/data/>.

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

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.

DPAW (2015) NatureMap - Mapping Western Australia Biodiversity, Department of Parks and Wildlife, viewed 30 March 2015, < http://naturemap.dpaw.wa.gov.au/default.aspx>.

Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

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

Mattiske Consulting Pty Ltd (2012) Flora and Vegetation Survey of the Kathleen Valley Gold Project Survey Area.

Ninox Wildlife Consulting (2012) A Level 1 Vertebrate Fauna Assessment of the Kathleen Valley Gold Project, Near Leinster, Western Australia. Unpublished report prepared for Ramelius Resources Ltd, October 2012.

Pringle, H.J.R., Van Vreeswyk, A.M.E., & Gilligan, S.A (2004) An Inventory and Condition Survey of the north-eastern Goldfields, Western Australia, Department of Agriculture, Western Australia.

Ramelius Resources (2015) Kathleen Valley Mining Proposal. Report prepared by Ramelius Resources, 15 December 2014.

Ramelius Resources (2015a) Reply Letter – Further Information Regarding Clearing Permit Application – Kathleen Valley Gold Project – CPS 6404/1 (PEC Advice).

Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	*Environmental Protection Act 1986*, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	*Rights in Water and Irrigation Act 1914*, Western Australia
s.17	Section 17 of *the Environment Protection Act 1986*, Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

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

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.
EN: Endangered - considered to be facing a very high risk of extinction in the wild.
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

X **Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).

IA **Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.

S **Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950,* listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P1 **Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

P2 **Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

P3 **Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5 **Priority Five - Conservation Dependent species:**
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.