Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3590/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Robe River Ltd**

1.3. Property details

Property: *Iron Ore (Cleveland Cliffs) Agreement Act 1964*
Mineral Lease 248SA (AML 70/248)
Local Government Area: Shire of Ashburton
Colloquial name: Bungaroo Millstream Pipeline Geotechnical Works

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
8		Mechanical Removal	Geotechnical Investigations

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 at a 1:250,000 scale for the whole of Western Australia. One Beard Vegetation Association has been mapped within the application area (GIS Database).

- 609: Mosaic: Hummock grasslands, open low tree steppe; bloodwood with sparse kanji shrubs over soft spinifex / Hummock grasslands, open low tree steppe; snappy gum over *Triodia wiseana* on a lateritic crust.

Biota Environmental Sciences conducted a flora and vegetation survey of the Bungaroo Coastal Water Project Area between 20 and 25 August 2009. This survey included the vegetation within the application area. Thirteen vegetation types were identified within the application area (Biota Environmental Sciences, 2010).

Creeks, Valleys and Watercourses

- ChAaAcoTeTw: *Corymbia hamersleyana* scattered trees over *Acacia ancistrocarpa*, *A. colei* tall shrubland over *Triodia epactia*, *T. wiseana* hummock grassland.

- AvChPlAbGOrTe: *Eucalyptus victrix*, *Corymbia hamersleyana* scattered trees over *Petalostylis labicheoides*, *Acacia bivenosa, Gossypium robinsonii* tall shrubland over *Triodia epactia* hummock grassland.

- ExChAcoAaTeTwTHt: *Eucalyptus xerothermica*, *Corymbia hamersleyana* scattered trees over *Acacia colei, A. ancistrocarpa* tall shrubland over *Triodia epactia, T. wiseana* hummock grassland over *Themeda triandra* open tussock grassland.

- ExChAtuGOrSsApyGwTe: *Eucalyptus xerothermica, Corymbia hamersleyana* scattered trees over *Acacia tumida, Gossypium robinsonii, Stylobasium spathulatum, A. pyrofolia, Grevillea wickhamii* tall open shrubland over *Triodia epactia* hummock

Clearing Description
Robe River Ltd has applied to clear up to 8 hectares of native vegetation within an application area of approximately 96.8 hectares for the purpose of geotechnical investigation works. The proposed clearing will be for track clearing (20 kilometres long by 4 metres wide) and up to 30 trenches (25 metres long, 0.5 metres wide and 1.8 metres deep) which will be located within the track clearing (Robe River Ltd, 2010). Vegetation will be cleared using a raised blade technique where practicable, or scrub rake in level terrain. Where existing tracks require maintenance the track may be graded using a lowered blade.

All cleared topsoil and vegetation will be stockpiled for use in rehabilitation. Robe River Ltd has advised that the trenches will not be left unattended and will be backfilled prior to the next one being excavated.

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

to

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

Comment
The proposed clearing activities are part of the Bungaroo Millstream Pipeline Geotechnical Works Programme which covers a total length of approximately 80 kilometres. This application area (CPS 3590/1) comprises of the western portion of the geotechnical works programme, and sits adjacent to clearing permit application area CPS 3597/1 which has been submitted for assessment by the Department of Environment and Conservation. Under clearing permit application CPS 3597/1 Robe River Ltd has applied to clear up to 18 hectares within an application area totalling approximately 688 hectares for the purpose of geotechnical investigation works.

grassland.

Plains and Lower Lying Areas

- AiAaTw: *Acacia inequilatera, A. ancistrocarpa* shrubland over *Triodia wiseana* hummock grassland.

- ApyAbTw: *Acacia pyrifolia, A. bivenosa* tall shrubland over *Triodia wiseana* hummock grassland.

- AsyAbTeTw: *Acacia synchronicia, A. bivenosa* open shrubland over *Triodia epactia, T. wiseana* hummock grassland.

- ChAiAaTw: *Corymbia hamersleyana* scattered trees over *Acacia inaequilatera, A. ancistrocarpa* open shrubland over hummock grassland.

Hills and Rocky Scree Slopes

- AaAacTbrTw: *Acacia ancistrocarpa, A. acradenia* scattered shrubs over *Triodia brizoides, T. wiseana* hummock grassland.

- AbTw: *Acacia bivenosa* scattered shurbs over *Triodia wiseana* hummock grassland.

- AiTwTbr: *Acacia inaequilatera* scattered tall shrubs over *Triodia wiseana, T. brizoides* hummock grassland.

- ElAiAbtw: *Eucalyptus leucophloia* scattered trees over *Acacia inaequilatera, A. bivenosa* scattered shrubs over *Triodia wiseana* hummock grassland.

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

A flora and vegetation survey of the Bungaroo Coastal Water Project Area was undertaken by Biota Environmental Sciences between 20 and 25 August 2009 and this survey included the vegetation within the application area. A total of 46 vegetation units were mapped within the Bungaroo Coastal Water Project Area, and 13 of these vegetation units were identified within the application area (Biota Environmental Sciences, 2010). The number of vegetation units within the application area does not indicate a high level of diversity in vegetation as it is common for long and narrow corridors to intersect numerous land systems (five within the application area), landforms and vegetation types (Biota Environmental Sciences, 2010).

A total of 231 native flora species were recorded within the Bungaroo Coastal Water Project Area (Biota Environmental Sciences, 2010). No Declared Rare Flora or Threatened Ecological were recorded within the application area and none would be expected to occur (Biota Environmental Sciences, 2010). One Priority Flora species, *Indigofera* sp. Bungaroo Creek (S. van Leeuwen 4301) (Priority 3) was recorded within the application area (Biota Environmental Sciences, 2010).

The assessing officer highlights that there is no information reporting the number of species within the application area, however, given the number of vegetation units within the application area compared to the Bungaroo Coastal Water Project Area it would be inferred that it would be less than 231 native flora species. Biota Environmental Sciences (2010) report that the total number of native flora species recorded within the Bungaroo Coastal Water Project Area is within the expected range for an area of this size in this locality, and does not represent a high species richness.

Nine weed species *Portulaca oleracea, Malvastrum americanum, Vachellia farnesiana, Cenchrus setiger, Cenchrus ciliaris, Setaria verticillata, Argemone ochroleuca, Aerva javanica and Citrullus colocynthis* were recorded within the Bungaroo Coastal Water Project Area (Biota Environmental Sciences, 2010). Care must be taken to ensure that the proposed clearing activities do not spread or introduce the above listed weed species to non infested areas. Should a permit be granted, it is recommended that a condition be imposed for the purpose of weed management.

The Pilbara bioregion remains largely uncleared with approximately 99.9% of the pre-European vegetation remaining and none of the land systems, landforms or vegetation communities are restricted to the application area (Shepherd, 2007). The proposed clearing of up to 8 hectares will be undertaken within a long and narrow corridor for geotechnical works. This proposed clearing is not likely to impact on area of high floral and faunal diversity compared to surrounding areas.

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

Methodology Biota Environmental Sciences (2010)
Shepherd (2007)

(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**
According to Shepherd (2007) approximately 99.9% of the pre-European vegetation remains within the Pilbara bioregion. The primary habitats present within the application area are considered widespread and abundant in the local and regional area (Biota Environmental Sciences, 2010). Given the extent of native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent an ecological linkage. With the clearing being undertaken to a width of approximately 4 metres it is unlikely that it will fragment the landscape or cause any impediments to fauna movements.

The excavated trenches may create fauna traps for the period that they remain open, however, Robe River Ltd (2010) has advised that the trenches will not be left unattended and that they will be backfilled prior to the next one being excavated. Given this approach it is unlikely that fauna would become trapped or fauna deaths would occur.

The proposed clearing is unlikely to result in a significant impact on fauna or the availability of fauna habitat in the local or regional area.

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

Methodology Biota Environmental Sciences (2010)
Robe River Ltd (2010)
Shepherd (2007)

(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 datasets there are no known records of Declared Rare Flora (DRF) within the application area (GIS database). The nearest record of DRF is located approximately 150 kilometres south-east of the application area (GIS Database). No DRF were recorded during the survey of the application area and none would be expected to occur (Biota Environmental Sciences, 2010).

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

Methodology Biota Environmental Sciences (2010)
GIS Database:
- Declared Rare and Priority Flora List

(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 records of Threatened Ecological Communities (TEC's) within the application area (GIS database). The nearest known TEC is located approximately 80 kilometres south-east of the application area (GIS database).

A Priority Ecological Community (PEC) is located approximately 3 kilometres north-west from the western portion of the application area, and a further ten PEC's are located on the mesas in the Pannawonica locality and within 75 kilometres of the application area (GIS Database). Given the distance separating the application area and these PEC's, the proposed clearing is not likely to impact on any of these PEC's.

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

Methodology GIS Database:
- Threatened Ecological Sites_1
- Threatened Ecological Boundaries

(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 clearing application area falls within the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) region in which approximately 99.9% of the pre-European vegetation remains (see table) (GIS database;

Shepherd, 2007).

The vegetation of the clearing application area has been mapped as Beard vegetation association 609: Mosaic: Hummock grasslands, open low tree steppe; bloodwood with sparse kanji shrubs over soft spinifex / Hummock grasslands, open low tree steppe; snappy gum over *Triodia wiseana* on a lateritic crust (GIS Database). According to Shepherd (2007) approximately 100% of Beard vegetation association 609 remains at both the state and bioregional level (see table).

According to the Bioregional Conservation Status of Ecological Vegetation Classes, the conservation status for the Pilbara Bioregion and Beard vegetation association 609 is of "Least Concern" (Department of Natural Resources and Environment, 2002) (see table).

While a small to moderate percentage of the vegetation types within the Pilbara bioregion are protected within conservation reserves, the bioregion remains largely uncleared. As a result, the conservation of the vegetation association within the bioregion is not likely to be impacted on by this proposal.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-european % in IUCN Class I-IV Reserves
IBRA Bioregion – Pilbara	17,804,188	17,794,647	~99.9	Least Concern	6.3
Beard veg assoc. – State					
609	74,186	74,186	~100	Least Concern	No information available
Beard veg assoc. – Bioregion					
609	74,186	74,186	~100	Least Concern	No information available

* Shepherd (2007)
** Department of Natural Resources and Environment (2002)

The vegetation under application is not a remnant of vegetation in an area that has been extensively cleared.

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

Methodology Department of Natural Resources and Environment (2002)
Shepherd (2007)
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 not likely to be at variance to this Principle**
There are no permanent wetlands or watercourses within the application area (GIS Database). Whilst there are numerous minor, non-perennial watercourses which intercept the application area, the vegetation communities growing in association with these watercourses are not unique and are considered common and widespread in the Pilbara bioregion within similar watercourses (GIS Database). The proposed clearing for geotechnical investigations is not likely to significantly impact on the conservation of vegetation growing in association with these watercourses.

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

Methodology GIS Database:
- Hydrography, linear_1

(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 the available datasets the application area intersects the Boolgeeda, Platform, Robe, McKay and Calcrete Land Systems (GIS Database).

The Boolgeeda Land System is characterised by stony lower slopes and plains below large range hill systems that support spinifex grasslands and Mulga shrublands (Van Vreeswyk et al., 2004). Van Vreeswyk et al. (2004) report that the Boolgeeda Land System is not susceptible to erosion.

The Platform Land System is characterised by dissected slopes and raised plains supporting hard spinifex grasslands (Van Vreeswyk et al., 2004). Van Vreeswyk et al. (2004) report that the Platform Land System is not susceptible to erosion.

The Robe Land System is characterised by low limonite mesas and buttes supporting soft spinifex (and occasionally hard spinifex) grasslands (Van Vreeswyk et al., 2004). Van Vreeswyk et al. (2004) report that the Robe Land System is generally not susceptible to vegetation degradation or erosion.

The McKay Land System is characterised by hills, ridges, plateaux remnants and breakaways of meta sedimentary and sedimentary rocks supporting hard spinifex grasslands. Vreeswyk et al. (2004) report that the McKay Land System is not prone to degradation or soil erosion.

The Calcrete Land System is characterised by low calcrete platforms and plains supporting shrubby hard spinifex grasslands (Van Vreeswyk et al., 2004). Van Vreeswyk et al. (2004) report that the Calcrete Land System has a low erosion risk.

Robe River Ltd (2010) has advised that the trenches will not be left unattended at any time and that they will be backfilled prior to the next trench being excavated. This will minimise land degradation hazards such as erosion. Should a permit be granted, it is recommended that a condition be imposed for the purpose of rehabilitation. No other land degradation hazards are expected to occur as a result of the proposed works.

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

Methodology Robe River Ltd (2010)
Van Vreeswyk et al. (2004)
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**
According to available datasets the application area is not located within a Department of Environment and Conservation (DEC) managed conservation area (GIS Database). Millstream-Chichester National Park is situated approximately 53 kilometres north-east and Cane River Conservation Park is situated approximately 73 kilometres south-west of the application area (GIS Database). With the Pilbara bioregion largely uncleared with approximately 99.9% of pre-European vegetation remaining (Shepherd, 2007), the vegetation under application is not considered an important ecological linkage the Millstream-Chichester National Park or Cane River Conservation Park.

The proposed clearing is not likely to comprise the environmental values of Millstream-Chichester National Park or Cane River Conservation Park.

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

Methodology Shepherd (2007)
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**
There are no permanent wetlands or watercourses within or adjacent to the application area (GIS Database). The proposed clearing is unlikely to cause deterioration in the quality of surface water in the local area.

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The nearest PDWSA is Millstream Water Reserve which is located approximately 28 kilometres north-east of the application area (GIS Database). Given the distance separating the application area and the nearest water supply area, the proposed clearing is unlikely to impact on the water quality of the Millstream Water Reserve.

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

Methodology GIS Database:
- Hydrography, linear_1
- 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 Robe River Catchment Area which covers a total area of approximately 757,138 hectares (GIS Database). The proposed clearing of native vegetation for geotechnical investigations is not likely to impact on the drainage characteristics of the Robe River Catchment, or the local area.

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

Methodology

GIS Database:
- Hydrographic Catchments - Catchments

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

Comments

There is one Native Title Claim over the area under application (WC99/012). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the tenement 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 Sites of Aboriginal Significance within the area applied to clear (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 through the clearing process. Robe River Limited (2010) has advised that heritage surveys will be undertaken and that any sites identified will be avoided.

The clearing permit application was advertised on 22 February 2010 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received during the public submissions period stating no objection to the proposal.

It is the proponent's responsibility to liaise with the Department of Environment and Conservation 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.

Methodology

GIS Database:
Robe River Ltd (2010)
- Native Title Claims
- Sites of Aboriginal Significance DIA

4. Assessor's comments

Comment

The proposal has been assessed against the Clearing Principles, and the proposed clearing is not likely to be at variance to Principles (a), (b), (c), (d), (f), (g), (h), (i) and (j) and is not at variance to Principle (e).

It is recommended that should a permit be granted, conditions be imposed on the permit for the purposes of weed management, rehabilitation, record keeping and permit reporting.

5. References

Biota Environmental Sciences (2010). Interim Summary of the Bungaroo Coastal Water Project Flora and Vegetation Survey, prepared by Biota Environmental Sciences, prepared for Robe River Ltd, January 2010.

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.

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

Robe River Ltd (2010). Documentation Accompanying Clearing Permit Application for CPS 3590/1, Prepared by Robe River Ltd, February 2010.

Shepherd, D.P. (2007) 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

Van Vreeswyk A.M.E., Payne A.L., Leighton K.A. and Hennig P. (2004). Technical Bulletin - An inventory and condition survey of rangelands in Pilbara Region, Western Australia, No 92, Department of Agriculture, Government of Western Australia, Perth, Western Australia.

6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAFWA	Department of Agriculture and Food, Western Australia.
DA	Department of Agriculture, Western Australia.
DEC	Department of Environment and Conservation
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), Western Australia.
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia.
DMP	Department of Mines and Petroleum, Western Australia.
DoE	Department of Environment, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
DoW	Department of Water
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
IBRA	Interim Biogeographic Regionalisation for Australia.
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

P1	**Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P2	**Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P3	**Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
P4	**Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
R	**Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
X	**Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1	**Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
Schedule 2	**Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
Schedule 3	**Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
Schedule 4	**Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P2 **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P3 **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P4 **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5 **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)*

EX **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W) **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.