



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2817/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Robe River Mining Co Pty Ltd

1.3. Property details

Property: Section 91 Licence 50109-2007_3_193 under the *Land Administration Act 1997*
Temporary Reserve 70/5461 pursuant to *Iron Ore (Robe River) Agreement Act 1964*
Local Government Area: Shire Of Roebourne
Colloquial name: Cape Lambert Camp

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4		Mechanical Removal	Expansion of an Existing Sprayfield

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 25 November 2010

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Vegetation within the application area has been mapped at a 1:250,000 scale as the following Beard vegetation association (Shepherd, 2007; GIS Database);

157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana*.

Western Botanical were commissioned by Robe River Iron Associates to undertake a flora and vegetation survey of the application area. The vegetation communities recorded within the application area have been described by Western Botanical (2008).

Sandy Alluvial Plains.

AsAtAstTe: *Acacia sabulosa* and *Acacia tumida* var. *pilbarensis* high open shrubland, over *Acacia stellaticeps* low open shrubland, over *Triodia epactia* and occasionally *Triodia schinzii* open hummock grassland. This vegetation covers a large portion of the southern part of the application area.

SIAsTe: *Santalum lanceolatum* low open shrubland over *Acacia stellaticeps* low open shrubland over *Acacia stellaticeps* low open shrubland, over *Triodia epactia* open hummock grasslands. This vegetation type is unique in that it is dominated by non-acacia shrub.

AstTe: *Acacia stellaticeps* low open shrubland, over *Triodia epactia* open hummock grassland.

Clearing Description Robe River Iron Associates has applied to clear up to 4 hectares of native vegetation within an application area of 14.9 hectares for the purpose of expanding the existing sprayfield which is situated adjacent to the existing Cape Lambert camp.

Vegetation will be cleared by a bulldozer with its blade down. The vegetation and topsoil will be collected and stockpiled for use in future rehabilitation (Robe River Iron Associates, 2008).

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

Comment Vegetation condition has been provided by Western Botanical (2008).

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 Chichester (PIL1) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by plains supporting a shrub steppe of *Acacia inaequilatera* over *Triodia wiseana* hummock grasslands, while *Eucalyptus*

leucophloia tree steppes occur on ranges (CALM, 2002).

The application area is located immediately adjacent to roads, and some sections of the application area have been previously disturbed by existing roads, tracks, a tank, pipelines and buildings (GIS Database; Robe River Iron Associates, 2008). A flora and vegetation survey of the application area was undertaken by botanists from Western Botanical between 17 and 19 May 2008. No priority flora were recorded within the application area.

The vegetation and habitat types occurring within the application area are well represented in the region (GIS Database; Robe River Iron Associates, 2008), and the application area is unlikely to be of higher biodiversity than surrounding areas.

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

Methodology CALM (2002)
Robe River Iron Associates (2008)
Western Botanical (2008)
GIS Database:
- Declared Rare and Priority Flora List
- IBRA WA (Regions - subregions)
- Pre-European Vegetation
- Road Centrelines

Officer Amanda HEWISON

(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**
Two broad habitat types were recorded within the application area. These were:

- Open *Acacia* or *Grevillea* shrublands over *Triodia wiseana* or *T. epactia* hummock grasses on stony hills; and
- Open shrublands of mainly *Acacia* species over soft spinifex (*Triodia epactia* and/or *T. schinzii*) hummock grasses or mixed tussock grasses on sandy or silty alluvial plains (Western Botanical, 2008).

There are no fauna habitats identified within the application area considered as necessary for the on-going maintenance of any significant fauna habitat (Western Botanical, 2008). The relatively small scale of the proposed development and the lack of specialised habitat suggest that the proposal represents a low risk of significant impact to any conservation significant species.

The fauna habitats identified within the application area are not considered as necessary for the on-going maintenance of any significant fauna habitat. It is likely that equal or higher quality vegetation and fauna habitats would exist throughout the surrounding area, and Pilbara region.

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

Methodology Western Botanical (2008)
Officer Amanda HEWISON

(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) species within the clearing application area (GIS database).

A flora and vegetation survey of the application area was undertaken by botanists from Western Botanical between 17 and 19 May 2008. Prior to conducting the field survey, Western Botanical (2008) carried out a search of the Department of Environment and Conservation Threatened Flora Database to identify DRF, Priority Flora and Threatened Ecological Communities known from the area.

No DRF species were recorded within the application area during the field survey (Western Botanical, 2008). As a result, the proposed clearing is unlikely to impact on any DRF species.

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

Methodology Western Botanical (2008)
GIS Database:
- Declared Rare and Priority Flora List

Officer Amanda HEWISON

(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) within the application area (GIS database; Western Botanical, 2008). The nearest known TEC is located approximately 107 kilometres south of the application area (GIS database). Western Botanical (2008) state that none of the vegetation types recorded within the application area fit the criteria to be considered as a Threatened Ecological Community. Given the distance between the proposal and the nearest known TEC, the proposed clearing is not likely to impact on the conservation of that TEC.

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

Methodology Western Botanical (2008)
GIS Database:
- Threatened Ecological Sites Buffered

Officer Amanda HEWISON

(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 99.95% of the pre-European vegetation remains (GIS Database; Shepherd, 2007) (see table).

The vegetation of the clearing application area has been mapped as Beard vegetation association 157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana* (GIS Database, Shepherd, 2007). According to Shepherd, (2007) approximately 100% of Beard vegetation association 157 remains at both the state and regional level.

According to the Bioregional Conservation Status of Ecological Vegetation Classes the conservation status for the Pilbara Bioregion and Beard vegetation associations 157 is of 'Least Concern' (Department of Natural Resources and Environment, 2002).

While a small 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 associations 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	~99.95%	Least Concern	~6.32%
Beard veg assoc. – State					
157	502,729	501,514	~99.8%	Least Concern	~17.9%
Beard veg assoc. – Bioregion					
157	198,633	198,518	~99.9%	Least Concern	~5.7%

* Shepherd (2007)

** Department of Natural Resources and Environment (2002)

The Assessing Officer has reviewed Shepherd (2007) vegetation statistics for the Pilbara region and for Beard vegetation association 157 and the vegetation under application is not a remnant of vegetation in an area that has been extensively cleared. Furthermore, the vegetation communities that have been identified within the application areas have been recorded throughout the wider Cape Lambert project area, and Beard vegetation mapping suggests that similar vegetation communities would be located in coastal environments throughout the Pilbara region (GIS Database; Shepherd, 2007).

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 WA (Regions - subregions)
- Pre-European Vegetation
- Clearing Instruments

Officer Amanda HEWISON

(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). One non-perennial watercourse traverses north-south through the central part of the application area and flows into an alluvial coastal flat which is situated immediately east of the application area (Western Botanical, 2008; GIS Database). Western Botanical (2008) has not identified the vegetation as riparian vegetation. The vegetation units growing in association with this drainage feature are considered common and widespread in the Cape Lambert locality, and are not considered to have any significant environmental values.

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

Methodology Western Botanical (2008)
GIS Database:
- Hydrography, linear_1

Officer Amanda HEWISON

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

Comments Proposal may be at variance to this Principle

According to the Department of Agriculture in Technical Bulletin No 92 "An inventory and condition survey of the rangelands of the Pilbara Region, Western Australia", the application areas comprise of the Ruth and Cheerawarra Land System (Van Vreeswyk et al., 2004; GIS Database).

- The Ruth Land System is characterised by hills and ridges of volcanic and other rocks supporting hard spinifex (and occasionally soft spinifex) grasslands (Van Vreeswyk et al., 2004). Aerial imagery and vegetation mapping indicates that the application areas are most likely located within the 'Lower slopes and stony plains' and 'Narrow drainage floors, creeklines and channels' land units (Van Vreeswyk et al., 2004; GIS Database; Robe River Iron Associates, 2008). Van Vreeswyk et al. (2004) state that the Ruth Land System is not susceptible to erosion (Van Vreeswyk et al., 2004), and this is likely due to surface mantles that comprise mainly of pebbles and cobbles interspersed with sandy earths.

- The Cheerawarra Land System is characterised by sandy coastal plains and saline and saline clay plains supporting soft and hard Spinifex grasslands and minor tussock grasslands (Van Vreeswyk et al., 2004). Aerial imagery and vegetation mapping indicates that the application areas are most likely located within the 'Sandplains' and 'Sandy surfaced alluvial plains' land units (Van Vreeswyk et al., 2004; GIS Database; Robe River Iron Associates, 2008). Van Vreeswyk et al. (2004) state that most units of the Cheerawarra Land System are highly susceptible to wind erosion if vegetative cover is depleted.

Robe River Iron Associates have applied to clear up to 4 hectares to increase the size of the existing spray field at the Cape Lambert Camp. Based on the assessment of landform information provided by Van Vreeswyk et al. (2004), it is considered that the portion of the application area that comprises the Cheerawarra Land System has high risk of wind erosion. Erosion risk is likely to be heightened during clearing, and for periods during which the cleared areas remain exposed. Potential land degradation impacts as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

The application area is situated within the Port Hedland Coast Catchment which covers a total area of approximately 744,301 hectares (GIS Database). Roebourne which is situated approximately 14 kilometres south of the application area experiences mean average rainfall of approximately 311.6 millimetres (Bureau of Meteorology, 2008), and experiences mean annual evaporation of approximately 3400 millimetres (GIS Database). Groundwater salinities within the application area and adjoining areas have been recorded in the range of 500 - 1,000 milligrams/Litre Total Dissolved Solids (GIS Database). Given the low rainfall to high evaporation rate for the application area, the proposed clearing native vegetation is unlikely to significantly increase water infiltration into the soil which could otherwise lead to significant rises to ground water levels. As a result, the proposed clearing is unlikely to increase land salinisation either on-site or off-site.

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

Methodology Bureau of Meteorology (2008)
Robe River Iron Associates (2008)
Van Vreeswyk et al. (2004)
GIS Database:
- Cape Lambert 20cm Orthomosaic Landgate 2005
- Evaporation Isopleths (Evaporation)
- Groundwater Salinity, Statewide (TDS_MG_L)
- Hydrographic catchments - catchments

Officer - Rangeland land system mapping
Amanda HEWISON

(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 application area is not located within a Department of Environment and Conservation managed conservation area (GIS Database; Western Botanical, 2008). The nearest conservation area is the 'B' Class Dolphin Island Nature Reserve which is situated approximately 30 kilometres north-west of the application area (GIS Database). Based on the distance between the proposal and the nearest conservation area, the proposed clearing is not likely to impact on the conservation values of Dolphin Island Nature Reserve.

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

Methodology Western Botanical (2008)
GIS Database:
- DEC Tenure

Officer Amanda HEWISON

(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). The nearest PDWSA is the Roebourne Water Reserve which is located approximately 15 kilometres south from 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 quality of the Roebourne Water Reserve.

There are no permanent wetlands or watercourses within the application area (GIS Database). One non-perennial watercourse traverses north-south through the central part of the application area and flows into a alluvial coastal flat which lies immediately east of the application area (GIS Database). Both areas are only likely to support surface water for short periods following significant rainfall. Given its close proximity to the coastline (< 2 kilometres), the alluvial coastal flat may be subject to inundation by extremely high tide events although water quality would be considered poor due to the high amount of suspended silt and clay sediments. The proposed clearing is not likely to impact on the quality of surface water in the area.

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

Methodology GIS Database:
- Public Drinking Water Source Areas (PDWSAs)
- Hydrography, linear_1
- WA Coastline

Officer Amanda HEWISON

(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 average annual rainfall for Roebourne which is situated approximately 14 kilometres south of the application area is 311.6 millimetres (Bureau of Meteorology, 2008). Bureau of Meteorology (2008) indicates that the Roebourne area and surrounding the locality receives the majority of rainfall between December and March. As a result, local flooding can be expected to occur seasonally in the Pilbara region as a result of heavy rainfall triggered by cyclonic activity and sporadic thunderstorms.

There are no permanently inundated wetlands or watercourses within the application area (GIS Database). Immediately east of the application area, and on the eastern side of Cape Lambert Road, lies a low lying drainage area that may occasionally be inundated during high tides or after significant rainfall (GIS Database). Western Botanical (2008) describe that the application area is located in a coastal environmental on sandy and silty alluvial plains which are considered free draining soils. The proposed clearing of up to 4 hectares is not likely to alter the drainage patterns within the Port Hedland Coast catchment, or significantly increase runoff in the local area.

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

Methodology Bureau of Meteorology (2008)
Western Botanical (2008)
GIS Database:
- Hydrography, linear_1
- Road Centrelines

Officer Amanda HEWISON

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

Comments

There is one native title claim over the area under application; (WC99/014) (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There is one registered Site of Aboriginal Significance (Site ID: 8798) that occurs 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.

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 licence or approvals are required for the proposed works.

The clearing permit application was advertised on 22 December 2008 by the Department of Industry and Resources inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology GIS Database
- Native Title Claims
- Sites of Aboriginal Significance DIA

Officer Amanda HEWISON

4. References

- Bureau of Meteorology (2009) Climate Statistics for Australian Locations. A Search for Climate Statistics for Roebourne, Australian Government Bureau of Meteorology, viewed 28 January 2009. <
http://www.bom.gov.au/climate/averages/tables/cw_004035.shtml>
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 1 (PIL1 - Chichester subregion) 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.
- 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 Iron Associates (2008) Application for Purpose Permit - Clearing for Expansion of Existing Sprayfield - (TR70/05461) - Land Administration Act Section 91 Licence 365/191-50109-2007/02 Applied for at DPI. September 2008.
- 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.
- Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.
- Western Botanical (2008) Flora, Vegetation and Fauna Assessment of the Additional Cape Lambert Camp: Native Vegetation Clearing Permit Report May 2008, Prepared for Pilbara Iron Pty Ltd, Prepared by Western Botanical, May 2008.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), 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 (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
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
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:

{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.