

#### 1. Application details 1.1. Permit application details Permit application No.: 2604/2 Permit type: **Purpose Permit** 1.2. Proponent details Proponent's name: **Robe River Pty Ltd** 1.3. Property details Iron Ore (Robe River) Agreement Act 1964 Property: Section 91 Licence 00338-2008\_3\_87 under the Land Administration Act 1997 Local Government Area: Shire of Roebourne **Colloquial name:** Cape Lambert Substation 1.4. Application **Clearing Area (ha)** No. Trees Method of Clearing For the purpose of: Mechanical Removal Construction of a substation and associated 6 infrastructure **Decision on application** 1.5. Decision on Permit Application: Grant **Decision Date:** 23 December 2010 Site Information 2. 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; Shepherd, 2007). 157: Hummock grasslands, grass steppe; hard spinifex, Triodia wiseana. The application area was surveyed by Biota Environmental Sciences staff and Pilbara Iron staff in April 2008 (Biota Environmental Sciences, 2008). The following vegetation types were identified within the application area. Vegetation of Stony Hills and Plains Acacia bivenosa scattered shrubs over Triodia wiseana hummock grassland: Very occasional Acacia 1. arida, Corchorus parviflorus, Indigofera monophylla, Paspalidium clementii, Polycarpaea longiflora, Rhynchosia minima, Senna glutinosa subsp. glutinosa, Senna glutinosa subsp. pruinosa, Tribulus suberosus, Trichodesma zeylanicum var. zeylanicum and Triumfetta clementii with only very scattered weeds (Cenchrus ciliaris). Acacia bivenosa scattered shrubs over Acacia stellaticeps low open shrubland over Triodia epactia hummock grassland: Fimbristylis simulans, Indigofera monophylla, Paspalidium clementii, Ptilotus astrolasius var. astrolasius, Trichodesma zeylanicum var. zeylanicum and Triumfetta clementii.

#### Vegetation of Sandy or Loamy Plains

- 1. Acacia colei var. colei, Grevillea pyramidalis tall open shrubland over Triodia epactia, Triodia schinzii closed hummock grassland: Bonamia linearis, Bulbostylis barbata, Chrysopogon fallax, Eragrostis eriopoda, Indigofera linifolia, Mollugo molluginea, Ptilotus ploystachyus var. arthrotrichus, Santalum lanceolatum and Tephrosia rosea var. venulosa with only scattered weeds present.
- Melaleuca lasiandra, Acacia colei var. colei tall shrubland over Triodia epactia, Triodia schinzii closed hummock grassland: Acacia coriacea subsp. coriacea, Cyperus blakeanus, Dolichandrone heterophylla and Ehretia saligna var. saligna with only scattered weeds.

Six species of introduced flora were recorded within the application area: Kapok Bush (*Aerva javanica*); Buffel Grass (*Cenchrus ciliaris*); Birdwood Grass (*Cenchrus setiger*); Purple Top Chloris (*Chloris barbata*); Purslane

Clearing Desc	<ul> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> <li>(Portulaca oleracea) and Verano Stylo (Stylosanthes hamata) (Biota Environmental Sciences, 2008).</li> </ul>
	The application area is immediately adjacent to the existing power station, with some areas suffering from previous disturbance (Biota Environmental Sciences, 2008). The construction of the substation and associated infrastructure will occur within a 39 hectare area adjacent to the existing power station (Biota Environmental
	Sciences, 2008).
Vegetation Co	ondition Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994); To
	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Biota Environmental Sciences (2008).
	Clearing permit CPS 2604/1 for the Cape Lambert Sub Station was originally granted on 25 November 2010. This clearing permit is being amended to redescribe the boundary of the area approved to clear. The amount of clearing will remain unchanged.
3. Assess	ment of application against clearing principles
	vegetation should not be cleared if it comprises a high level of biological diversity.
(a) Native	Proposal is not likely to be at variance to this Principle The application area occurs within the Chichester (PIL1) sub-region of the Pilbara Bioregion of the Interim Biogeographic Regionalisation of Australia (IBRA) (GIS Database). This sub-region is characterised by plains supporting a shrub steppe of <i>Acacia inaequilatera</i> over <i>Triodia wiseana</i> hummock grasslands, while <i>Eucalyptus</i> <i>leucophloia</i> tree steppes occur on ranges (CALM, 2002). The vegetation described within the application area is typical of the bioregion (Biota Environmental Sciences, 2008).
	A vegetation survey of the application area and surrounding vegetation identified 131 taxa of native vascular flora from 83 genera and 39 families (Biota Environmental Sciences, 2008). The total number of vascular flora species present was considered to be relatively low for the study area. Fabaceae (32), Poaceae (24), Malvaceae (8), Convolvulaceae (7), Amaranthaceae (7), Euphorbiaceae (6), Chenopodiaceae (5), Asteraceae (4), and Cyperaceae (4) families are particularly species rich and diverse within the application area (Biota

(4), and Cyperaceae (4) families are particularly species rich and diverse within the application area (Biota Environmental Sciences, 2008). No species of Priority Flora were recorded within the application area during the flora survey.

Six introduced flora species were recorded during the survey (Biota Environmental Sciences, 2008). None of these species are listed as 'Declared Plant' species under the *Agriculture and Related Resources Protection Act 1976* by the Department of Agriculture and Food, however Buffel Grass (*Cenchrus ciliaris*) is considered to be a serious environmental weed (Biota Environmental Sciences, 2008). The presence of introduced flora species is likely to reduce the biological diversity of the application area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the

The application area is not likely to have a greater diversity than similar areas within the region. The landforms, vegetation types and fauna habitats in the application area are well represented in the Pilbara Region (Biota Environmental Sciences, 2008; GIS Database). Given the high level of disturbance and vegetation degradation due to infestation from introduced (weed) species and previous clearing activities it is not likely that the application area comprises a higher level of biological diversity than other undisturbed areas (Biota Environmental Sciences, 2008).

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

- Methodology Biota Environmental Sciences (2008) CALM (2002) GIS Database: - IBRA WA (Regions - subregions)
  - Pre-European Vegetation

(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

implementation of a weed management condition.

A fauna habitat assessment was conducted by a Robe River Pty Ltd botanist with zoological experience and this was subsequently confirmed by Biota zoologists (Biota Environmental Sciences, 2008). Two broad habitat

types were recorded within the application area. These were;

- Stony Hills and Plains: Acacia bivenosa scattered shrubs over Triodia wiseana or Triodia epactia hummock grassland; and
- Loamy and Sand Plains: Melaleuca lasiandra, Acacia colei, Grevillea pyramidalis tall open shrubland over Triodia epactia, Triodia schinzii closed hummock grassland (Biota Environmental Sciences, 2008).

The vegetation communities present in a large part of the application area have a significant level of degradation due to infestation with Buffel Grass (*Cenchrus ciliaris*) and compared to intact native vegetation communities, this introduced grass species does not provide a significant habitat to local fauna species (Biota Environmental Sciences, 2008).

The fauna habitats identified within the application area are not considered to comprise the whole or part of, or be necessary for the maintenance of, a significant habitat for fauna. 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 Biota Environmental Sciences (2008)

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

Comments P

**Proposal is not likely to be at variance to this Principle** According to available databases, no Declared Rare Flora (DRF) species have been recorded within the application area.

Biota conducted a flora and vegetation field survey of the application area in April 2008 (Biota Environmental Sciences, 2008). No species of DRF were recorded within the application area during the flora survey.

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

Methodology Biota Environmental Sciences (2008) 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 known Threatened Ecological Communities (TEC's) within the application area (GIS Database). The nearest known TEC is the Themeda Grassland communities located approximately 181 km south of the application area (GIS Database). Due to the distance from the application area, the TEC is unlikely to be affected by the proposed clearing.

Biota Environmental Sciences (2008) reported that no Threatened Ecological Communities were identified during the flora survey of the application area.

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

- Methodology Biota Environmental Sciences (2008) 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 application area falls within the IBRA Pilbara Bioregion. Shepherd (2007) reports that approximately 99.95% of the pre-European vegetation remains in this Bioregion. The vegetation in the application area is recorded as Beard vegetation association 157: Hummock grasslands, grass steppe; hard spinifex *Triodia wiseana* (GIS Database; Shepherd, 2007). According to Shepherd (2007) there is approximately 99.9% of this vegetation type remaining at both a state and bioregional level (see table below).

Therefore the vegetation within the application area is not a significant remnant of native vegetation within an area that has been extensively cleared.

	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 vegetation associations - State					
157	502,729	501,514	~99.8%	Least Concern	~17.9%
Beard vegetation associations - Bioregion					
157	198,633	198,518	~99.9%	Least Concern	~5.7%

\* Shepherd (2007)

\*\* 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) Shepherd (2007) GIS Database: - 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

According to available databases there are many minor, non-perennial drainage lines located within the application area (GIS Database). However, the native vegetation recorded within the application area is not riparian vegetation (Biota Environmental Sciences, 2008).

As the minor drainage lines located within the application area are only likely to flow following significant rainfall, the proposed clearing is unlikely to result in any significant impact to any watercourse or wetland provided natural surface water flow patterns are not disturbed.

The proponent is required to obtain a Bed and Banks Permit in order to disturb any watercourse within the application area.

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

Methodology Biota Environmental Sciences (2008)

GIS Database:

- 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

The application area has been surveyed by the Department of Agriculture and Food (Van Vreeswyk et al., 2004), and is comprised of the following land systems (GIS Database);

- Ruth Land System
- Rocklea Land System

The Ruth Land System is described as hills and ridges of volcanic and other rocks supporting hard spinifex (and occasionally soft spinifex) grasslands (Van Vreeswyk et al., 2004). An analysis of aerial photography for the application area reveals the application area is most likely to fall within the 'Hill, ridge and upper slope', 'lower slope and stony plains' and 'sand plains' land units. This land system is not susceptible to erosion due to a surface mantle of cobbles and pebbles. The vegetation described by Van Vreeswyk et al. (2004) accurately reflects the vegetation types described in vegetation surveys conducted over the area (Biota Environmental Sciences, 2008).

The Rocklea Land System is described as basalt hills, plateaux, lower slopes and minor stony plains supporting hard spinifex (and occasionally soft spinifex) grasslands (Van Vreeswyk et al., 2004). An analysis of aerial photography for the application area reveals the application area is most likely to fall within the 'Hill, ridge,

plateau and upper slope' land unit. These land units are not susceptible to erosion due to a surface mantle of very abundant cobbles and pebbles. The vegetation described by Van Vreeswyk et al (2004) accurately reflects the vegetation types described in vegetation surveys conducted over the area (Biota Environmental Sciences, 2008).

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

- Methodology Biota Environmental Sciences (2008) 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

The nearest terrestrial DEC managed land is the Millstream Chichester National Park located approximately 56.5 km south of the application area (GIS Database).

At this distance it is not likely that the clearing will impact on the environmental values of any adjacent or nearby conservation area.

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

According to available databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database).

The application area has suffered previous disturbance, and the proposed clearing of disturbed and degraded vegetation is unlikely to have a significant impact on the quality or quantity of groundwater (DoW, 2008). The application area is relatively flat and the proposed clearing area is unlikely to result in significant changes to surface water flows (GIS Database).

There are no permanent water bodies or watercourses within the application area (GIS Database). The application area is located in a semi-desert-tropical region, with an average annual rainfall of approximately 300 millimetres falling mainly during the summer months (CALM, 2002). Rainfall can be either intense falls associated with cyclonic events or scattered falls associated with thunderstorm events. The application area experiences an average annual evaporation rate of approximately 2,500 millimetres (CALM, 2002). Therefore, during normal rainfall events, surface water within the application area is likely to evaporate or be utilised by vegetation quickly.

The groundwater salinity within the application area is approximately 1,000 - 3,000 milligrams/Litre Total Dissolved solids (TDS) (GIS Database). This is considered to be potable water. Given the size of the area to be cleared (6 hectares) compared to the size of the Pilbara Groundwater Province (approximately 5,557,665 hectares) (GIS Database), the proposed clearing is not likely to cause salinity levels within the application area to alter significantly.

There are no known Groundwater Dependent Ecosystems within the application area (GIS Database).

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

Methodology CALM (2002)

DoW (2008)

- GIS Database:
- Groundwater Provinces
- Groundwater Salinity, Statewide
- Hydrography, Linear
- Potential Groundwater Dependent Ecosystems
- Public Drinking Water Source Areas (PDWSA's)

	vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the ce or intensity of flooding.			
Comments	<b>Proposal is not likely to be at variance to this Principle</b> The application area drains into the Coastal catchment area (GIS Database). The relatively small area to be cleared (6 hectares) in relation to the size of the catchment area (744, 301 hectares) (GIS Database) is unlikely to cause or exacerbate the incidence or intensity of flooding.			
	Based on the above, the proposed clearing is not likely to be at variance to this Principle.			
Methodology	GIS Database: - Hydrographic Catchments - Catchments			
Planning in	strument, Native Title, Previous EPA decision or other matter.			
Comments	There is one Native Title Claim (WC33-014) over the area under application. This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the tenure has been granted in accordance with the future act regime of the <i>Native Title Act 1993</i> 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 <i>Native Title Act 1993</i> .			
	There are no known Aboriginal sites of significance within the vicinity of the application area (GIS Database). It is the proponent's responsibility to comply with the <i>Aboriginal Heritage Act 1972</i> 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 licences or approvals are required for the proposed works.			
	The clearing permit application was advertised on 28 July 2008 by the Department of Industry and Resources inviting submissions from the public. No submissions were received regarding this application.			
	Clearing permit CPS 2604/1 for the Cape Lambert Sub Station was originally granted on 25 November 2010. This clearing permit is being amended to redescribe the boundary of the area approved to clear. The amount of clearing will remain unchanged.			
Methodology	GIS Database: - Aboriginal Sites of Significance - Native Title NNTT			
4. Referen	ces			
Biota Environi Re CALM (2002) and Department o at r	mental Sciences (2008) Pilbara Power System Upgrade Additional Areas: Native Vegetation Clearing Permit port. Biota Environmental Sciences Pty Ltd, Western Australia. A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation d Land Management, Western Australia. f Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity nultiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment,			
DoW (2008) V Res Keighery, B.J.	toria. Vater Quality Advice. Advice to assessing officer, Native Vegetation Branch, Department of Industry and sources (DoIR). Department of Water, Western Australia. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of A (Inc). Nedlands, Western Australia.			
<ul> <li>WA (Inc). Nedlands, Western Australia.</li> <li>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.</li> <li>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.</li> </ul>				

### 5. Glossary

### Acronyms:

ВоМ	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
DolR	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 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 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 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 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, Page 7

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.