

# **Clearing Permit Decision Report**

### 1. Application details

1.1. Permit application details

Permit application No.: 3178/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Robe River Mining Co Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 47/102

Local Government Area: Shire of Ashburton

Colloquial name: Western Creek Bridge Repairs

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

Mechanical Removal Access track and work area

### 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).

- 93: Hummock grasslands, shrub steppe; kanji over soft spinifex.

Biota Environmental Sciences (2008) have identified and mapped four vegetation communities within the application area.

### Vegetation of Stony Hills and Plains

1. ChApyAbTwTe: Hill/stony plains vegetation of *Corymbia hamersleyana* scattered low trees over *Acacia pyrifolia* scattered tall shrubs over *A. bivenosa* open shrubland over *Triodia wiseana*, *T. epactia* hummock grassland.

# Vegetation of Major Creeklines and Floodplains dominated by *Eucalyptus victrix*

- **2. EvMg:** Eucalyptus victrix low open woodland over Melaleuca glomerata tall shrubland;
- 3. EvAtrTeCEc: Eucalytpus victrix low open woodland over Acacia trachycarpa tall open shrubland over Triodia epactia open hummock grassland and Cenchrus ciliaris tussock grassland; and
- **4. EvApyTwTeCe:** Eucalyptus victrix scattered low trees over Acacia pyrifolia tall open scrub to tall open shrubland over Triodia wiseana, T. epactia hummock grassland and Cenchrus ciliaris, C. setiger open tussock grassland.

# Clearing Description

Robe River Mining Co Pty Ltd has applied to clear up to 1 hectare within an application area of 4.9 hectares for the purposes of widening an existing track and creation of a work area (Robe River Pty Ltd, 2009). The existing track (approximately 2.5 metres wide) will be widened to a maximum width of 10 metres. The work area will be located adjacent to the railway and will be cleared to allow safe access for the railway maintenance activities.

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 activities (Robe River Pty Ltd, 2009).

# **Vegetation Condition**

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

#### Comment

The assessing officer attended a site inspection of the application area on 2 July 2009. It was observed that the existing access track (to be widened) is located on the southern bank of Western Creek, and the work area on the northern bank. A small creek pool was observed within Western Creek, however the remainder of the creek system within the application area was dry.

Robe River Pty Ltd explained that the work area would be accessed by driving vehicles and clearing equipment over the stony surfaces of the creek bed and banks which were observed to be largely void of any vegetation.

## 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 is located within the Chichester subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). Shepherd (2007) indicates that approximately 100% of the pre-european vegetation extent remains, as a result large areas of intact vegetation remain within the bioregion.

Four vegetation communities were identified within the application area (Biota Environmental Sciences, 2008). None of these vegetation communities are expected to support any populations of Declared Rare or Priority Flora species (Biota Environmental Sciences, 2008).

Three vegetation types were identified by Biota Environmental Sciences (2008) as growing in association with Western Creek; EvMg, EvAtrTeCEc and EvApyTwTeCe. These vegetation communities are considered to have high conservation value due to the riparian nature of vegetation and the potential for species such as *Eucalyptus victrix* to provide suitable habitat for fauna (Biota Environmental Sciences, 2008). However, vegetation mapping by Biota Environmental Sciences (2008) indicates that the vegetation communities within the application area are likely to be well represented elsewhere within the local and regional area.

The vegetation to be cleared is not likely to represent and area of higher ecosystem or species diversity than the surrounding landscape in the local area.

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

#### Methodology

Biota Environmental Sciences (2008)

Shepherd (2007) GIS Database:

- Interim Biogeographic Regionalisation of Australia (subregions)
- Interim Biogeographic Regionalisation of Australia

# (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

### Comments Proposal is not likely to be at variance to this Principle

A site inspection of the application area was undertaken by the assessing officer on 2 July 2009 and it was observed that the proposed clearing will not impact on any landform features such as ranges, ridges, outcrops or caves which may be suitable to provide habitat for fauna. The vegetation to be cleared does not represent a fauna corridor. The proposed clearing is not likely to impact on an ecological linkage that is required for the maintenance of fauna.

A small creek pool was observed within the portion of Western Creek which intercepts the application area, and several other creek pools were observed upstream and downstream of the application area. It is likely that these creek pools would act as a water source for a variety of fauna species, and the vegetation growing within close proximity to the creek pool may be used as habitat or a refuge by fauna species which utilise the water source

Three vegetation types were identified by Biota Environmental Sciences (2008) as growing in association with Western Creek; EvMg, EvAtrTeCEc and EvApyTwTeCe. These vegetation communities are considered to have high conservation value due to the riparian nature of vegetation and the potential for species such as *Eucalyptus victrix* to provide suitable habitat for fauna (Biota Environmental Sciences, 2008).

Vegetation mapping by Biota Environmental Sciences (2008) indicates that the fauna habitats within the application area are likely to be well represented elsewhere within the local and regional area. The proposed clearing activities are unlikely to significantly impact on the vegetation communities within the application area, or the availability of similar fauna habitats in the local area.

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 Proposal is not likely to be at variance to this Principle

According to available datasets there are no records of Declared Rare Flora (DRF) or Priority Flora within the application area (GIS Database). There are no records of any DRF or Priority Flora species within 20 kilometres of the application area (GIS Database).

Biota Environmental Sciences (2008) have mapped the vegetation communities within the application and none are expected to support populations or DRF Priority Flora species (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)

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

According to available datasets no Threatened Ecological Communities (TEC's) have been recorded within the application area (GIS Database). The nearest TEC is recorded approximately 43 kilometres south of the application area.

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

#### Methodology GIS Database:

- Threatened Ecological Communities

# (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 93: Hummock grasslands, shrub steppe; kanji over soft spinifex (GIS Database; Shepherd, 2007). According to Shepherd (2007) approximately 100% of Beard vegetation association 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 93 is of "Least Concern" (Department of Natural Resources and Environment, 2002) (see table).

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	~99.9	Least Concern	6.3
Beard veg assoc.  – State					
93	3,044,308	3,044,249	~100	Least Concern	0.4
Beard veg assoc.  – Bioregion					
93	3,042,113	3,042,064	~100	Least Concern	0.4

<sup>\*</sup> Shepherd (2007)

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:

- Interim Biogeographic Regionalisation of Australia

<sup>\*\*</sup> Department of Natural Resources and Environment (2002)

# (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

### **Comments** Proposal is at variance to this Principle

There are no permanent wetlands or watercourses within or adjacent to the application area (GIS Database).

Western Creek intercepts the application area and this creek system is considered a non-perennial watercourse as it is known to sustain flow events following significant rainfall (GIS Database). Three vegetation types were identified by Biota Environmental Sciences (2008) as growing in association with Western Creek; EvMg, EvAtrTeCEc and EvApyTwTeCe. These vegetation communities are common along Western Creek and nearby Harding River, and are considered to have high conservation value (Biota Environmental Sciences, 2008).

Based on the above, the proposed clearing is at variance to this Principle. However, the proposed clearing activities are not likely to significantly impact on the extent of these vegetation communities within the application area, or local area.

#### 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

According to the Department of Agriculture in Technical Bulletin No. 92 "An inventory and condition survey of the rangelands in the Pilbara region, Western Australia" (Van Vreeswyk et al., 2004), the application area is comprised of the River and Rocklea land systems.

The River Land System is described as active flood plains and major rivers supporting grassy eucalypt woodlands, tussock grasslands and soft spinifex grasslands (Van Vreeswyk et al., 2004). The application area is characterised by the landform unit 'Minor and major channels'. The channels are generally void of vegetation whilst the banks comprise of fringing woodlands with *Eucalyptus* species with an understorey of sedges and grasses including *Cenchrus* and *Triodia* species (Van Vreeswyk et al., 2004). The system is largely stabilised by buffel and spinifex and accelerated erosion is uncommon (Van Vreeswyk et al., 2004). Susceptibility to erosion is high or very high if vegetative cover is removed.

The clearing of vegetation within the River land system may promote water erosion especially during flood events. However, it was observed during a site visit of the application area on 2 July that the creek bed area was largely void of vegetation. The surface soils were predominately comprised of stony materials, which are likely to demonstrate higher resistance to erosion. Importantly, no significant erosion was observed within the application area during the site inspection. The proposal involves clearing little or no vegetation, thereby minimising the risk of erosion.

A small portion of the proposed access track upgrade is characterised by Rocklea land system which comprises of stony plains supporting hard spinifex grasslands (GIS Database; Van Vreeswyk et al., 2004). During a site visit of the application area by the assessing officer on 2 July 2009 it was observed that this area was located on a stony plain, and outside of the flow area for Western Creek. This area is likely to have a low erosion hazard (Van Vreeswyk et al., 2004).

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

# Methodology Van

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 at variance to this Principle

The application area is located within the Department of Environment and Conservation managed Millstream-Chichester National Park (GIS Database). The Millstream-Chichester National Park covers an area of approximately 200,000 hectares and contains unique wetlands of important natural value and, with the associated aquifer, supports a high diversity of flora and fauna (Department of Environment and Conservation, 2007). In addition to its unique environmental values, the National Park has significant cultural, recreational and commercial values (Department of Environment and Conservation, 2007).

Under the Environmental Protection Authority's (EPA) Position Statement No. 9 Environmental Offsets (2006) National Parks are considered 'critical assets'. Environmental Protection Authority (2006) states that 'critical assets' represent the most important assets in the State that must be fully protected and conserved. In addition, the application area is also located with the Chichester Range National Park (1977 boundary) Register of National Estate, which is an environmentally sensitive area (GIS Database).

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

Robe River Pty Ltd proposes to clear up 1 hectare of native vegetation within the Millstream-Chichester National Park. Whilst this proposed clearing would only impact on a very small portion of the National Park, the activities are likely to result in an area of permanent disturbance. Under the assessment criteria of this Clearing Principle, native vegetation should not be cleared if it contributes significantly to the environmental values of a conservation area. The assessing officer considers that the minor and low impact nature of the proposed clearing will not pose a significant adverse impact to the environmental values of the Millstream-Chichester National Park.

#### Methodology

Department of Environment and Conservation (2007)

Environmental Protection Authority (2006)

GIS Database:

- CALM Managed Lands and Waters
- Clearing Regulations Environmentally Sensitive Areas
- Register of National Estate

# (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 may be at variance to this Principle

There are no permanent wetlands or watercourses within or adjacent to the application area (GIS Database). Western Creek intercepts the application area and this watercourse is known to sustain flow events following significant rainfall. The assessing officer carried out a site inspection of the application area on 2 July 2009 and small creek pool was observed within Western Creek. The size and existence of this creek pool is likely to be dependent on seasonal rainfall, therefore it is likely to show variation in size and existence over time. The proposed clearing will occur adjacent to this creek pool, therefore, there is the possibility that the exposed surfaces may increase sedimentation entering this creek pool which in turn may increase turbidity.

The application area is located within the Harding Dam Catchment Area (GIS Database). The Harding Dam Catchment was gazetted under the *Country Areas Water Suppy Act 1947* in January 2001 (Department of Water, 2009). This area has been assigned a 'Priority 1 (P1)' under the Water Source Protection Classification System. Mining, including maintenance activities are compatible with conditions in P1 Public Drinking Water Source Areas (Department of Water, 2009). The Department of Water considers that the proposed clearing of 1 hectare of native vegetation is acceptable (Department of Water, 2009).

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

#### Methodology

Department of Water (2009)

GIS Database:

- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)

# (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

#### Comments

## Proposal is not likely to be at variance to this Principle

The application area is located within the Harding River catchment which covers an area of approximately 155,807 hectares (GIS Database). Western Creek intercepts the application area and this watercourse is known to sustain significant flow events which are generated by runoff within the catchment following significant rainfall events (GIS Database). The proposed clearing of up to 1 hectare for the widening of an existing track and work area is not likely to create a catchment area that would significantly increase peak flood height or duration in the catchment 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 (WC99/014). 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 three 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. Hamersley Iron Pty Ltd have advised that heritage surveys will be undertaken and that any sites identified will be avoided, or a section 18 licence will be applied for.

One submission was received in relation to the proposal stating no objection.

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:

- Native Title Claims
- Aboriginal Sites of Significance

## 4. Assessor's comments

#### Comment

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

Should the permit be granted, it is recommended that conditions be imposed on the permit for the purposes of weed management, retention of topsoil and vegetation, record keeping and permit reporting.

#### 5. References

- Biota Environmental Sciences (2008). A Vegetation and Flora Survey of the Rio Tinto Rail Duplication Project Cape Lambert to Emu Siding, prepared for Rio Tinto Iron Ore, prepared by Biota Environmental Sciences, August 2008.
- Department of Environment and Conservation (2007). Millstream-Chichester National Park and Mungaroona Range Nature
  Reserve Draft Management Plan 2007, Department of Environment and Conservation, Conservation Commission of
  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.
- Department of Water (2009). Application to Clear Native Vegetation CPS 3178/1, Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Mines and Petroleum, received 10 July 2009, Pilbara Region, Department of Water.
- Environmental Protection Authority (2006). Environmental Offsets Position Statement No. 9, prepared by the Environmental Protection Authority, January 2006.
- 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 Pty Ltd (2009). Application for Purpose Clearing Permit CPS 3178/1 Access Track and Work Area on Miscellaneous Licence 47/102, June 2009.
- 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.

**DOLA**Department of Industry and Resources, Western Australia.
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:**

**P4** 

X

{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.

**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.

**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.

**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.

 $\{Wild life\ Conservation\ (Specially\ Protected\ Fauna)\ Notice\ 2005\}\ [Wild life\ Conservation\ Act\ 1950]: The protection of the protected of the protecte$ 

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}:-

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.

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.

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.

**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.