



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4665/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: PMR Quarries Pty Ltd T/A WA Limestone Co

### 1.3. Property details

Property: Mining Lease 08/475  
Miscellaneous Licence 08/60  
Local Government Area: Shire of Ashburton  
Colloquial name: Mt Minnie Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10.22		Mechanical Removal	Construction of Quarry and Associated Infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 30 November 2011

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation association has been mapped within the application area (GIS Database; Shepherd, 2009):

585 - Mosaic: Shrublands; snakewood & *Acacia victoriae* scrub / Hummock grasslands, shrub-steppe; kanji over soft spinifex and *Triodia basedowii*.

A flora and vegetation survey of the application area was conducted by Native Vegetation Solutions (2011) in July 2011. The following two vegetation communities were recorded within the application area:

*Acacia inaequilatera* over *Acacia bivenosa* and *Acacia ancistrocarpa* over *Triodia wiseana*; and

*Acacia ancistrocarpa* and *Acacia bivenosa* over *Triodia wiseana*.

**Clearing Description** PMR Quarries Pty Ltd T/A WA Limestone Co (WA Limestone Co) has applied to clear up to 10.22 hectares of native vegetation, within a broader area of approximately 176 hectares, for the purpose of constructing a quarry and associated infrastructure.

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

**Comment** The application area is located in the Pilbara region of Western Australia and is situated approximately 69 kilometres south east of Onslow.

## 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 Roebourne (PIL4) subregion of the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). This subregion is characterised by quaternary alluvial and older colluvial coastal and subcoastal plains with a grass savannah of mixed bunch and hummock grasses, and dwarf shrub steppe of *Acacia stellaticeps* or *Acacia pyrifolia* and *Acacia inaequilatera*. Uplands are dominated by *Triodia* hummock grasslands (CALM, 2002). Ephemeral drainage lines support *Eucalyptus victrix* or *Corymbia hamersleyana* woodlands (CALM, 2002). Samphire, *Sporobolus* and mangal occur on marine alluvial flats and river deltas (CALM, 2002).

A flora and vegetation survey of the application area was conducted by Native Vegetation Solutions (2011) in July 2011. A total of 51 flora taxa were recorded from 17 families and 29 genera, therefore suggesting that floral diversity is not high within the application area (Native Vegetation Solutions, 2011; Keith Lindbeck and Associates, 2011a).

One introduced flora species, *Brassica napus*, was recorded within the application area during a flora and vegetation survey conducted by Native Vegetation Solutions (2011) in July 2011. Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This can in turn lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. This species is not listed as a 'Declared Plant' species under the *Agriculture and Related Resources Protection Act 1976* by the Department of Agriculture and Food. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

There are no known records of Declared Rare Flora (DRF) or Priority Flora within the application area (GIS Database). No DRF or Priority Flora species were recorded during a flora and vegetation survey within the application area conducted by Native Vegetation Solutions (2011) in July 2011.

There are no known records of Threatened Ecological Communities (TEC's) or Priority Ecological Communities (PEC's) within the application area (GIS Database). The nearest known PEC is located approximately 31 kilometres north of the application area. At this distance there is little likelihood that the proposed clearing will impact on this PEC.

A fauna survey of the application area was conducted by Keith Lindbeck and Associates (2011b) in July 2011. This survey identified one fauna habitat type, *Acacia* shrubland over hummock grassland, within the application area (Keith Lindbeck and Associates, 2011b). This habitat is not restricted to the project area and is regionally widespread (Keith Lindbeck and Associates, 2011a).

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

**Methodology** CALM (2002)  
Keith Lindbeck and Associates (2011a)  
Keith Lindbeck and Associates (2011b)  
Native Vegetation Solutions (2011)  
GIS Database:  
- IBRA WA (regions – subregions)  
- Threatened Ecological Sites Buffered  
- Threatened and Priority Flora

**(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 fauna survey of the application area was conducted by Keith Lindbeck and Associates (2011b) in July 2011. This survey identified one fauna habitat type, *Acacia* shrubland over hummock grassland, within the application area (Keith Lindbeck and Associates, 2011b). This habitat is not restricted to the project area and is regionally widespread (Keith Lindbeck and Associates, 2011a).

A desktop fauna survey conducted by Keith Lindbeck and Associates (2011b) identified the potential for 17 conservation significant fauna species to occur within the application area. A field survey of the application area conducted by Keith Lindbeck and Associates (2011b) in July 2011 identified potential habitat for the following five conservation significant fauna species:

- Short-tailed Mouse (*Leggadina lakedownensis*) Priority 4 – this species occurs in tropical coastal northern Australia, with a recent recording made in 2009 approximately 45 kilometres west of the application area. This species is generally found on alluvial clay or sandy soils. The soil within the application area ranged from sand to rocky substrate. It is considered unlikely that this species would be present within the application area;
- Western Pebble-mound Mouse (*Pseudomys chapmani*) Priority 4 – this species occurs on gentle slopes of rocky ranges where the ground is covered by stony mulch and vegetated by hard Spinifex, often with sparse overstorey of eucalypts and scattered shrubs (Van Dyck & Strahan, 2008). A decline in this species occurred prior to 1970, likely to be caused by the introduction of foxes and exotic herbivores (Van Dyck & Strahan, 2008). This species is considered to be secure in its remaining range where foxes are rare and preferred habitat is little utilised by exotic herbivores (Van Dyck & Strahan, 2008);
- Peregrine Falcon (*Falco peregrines*) Schedule 4 – this species inhabits cliff faces along the coast, near rivers and in ranges. This species is highly mobile and the proposed clearing of 10.22 hectares within *Acacia* shrubland and hummock grassland is unlikely to impact on the conservation of this species;
- Australian Bustard (*Ardeotis australis*) Priority 4 – this species occurs over much of Western Australia. Given the range and the mobility of this species, it is likely to avoid areas of disturbance; and
- Rainbow Bee-eater (*Merops ornatus*) Migratory – this species is distributed across much of mainland Australia. Given that this species has such a broad distribution and is highly mobile, it is considered unlikely that the proposed clearing of 10.22 hectares will impact on the conservation of this species.

While there is the potential for these five species to occur within the application area, given the high mobility of the bird species and the lack of recent nearby records for all species, it is considered unlikely that the proposed clearing will impact on the conservation of any of these species.

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

**Methodology** Keith Lindbeck and Associates (2011a)  
Keith Lindbeck and Associates (2011b)  
Van Dyck & Strahan (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**

There are no known records of Declared Rare Flora (DRF) within the application area (GIS Database). A flora and vegetation survey conducted over the application area by Native Vegetation Solutions (2011) did not identify any DRF species within the application area.

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

**Methodology** Native Vegetation Solutions (2011)  
GIS Database:  
- Threatened and Priority Flora

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

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

There are no known records of Threatened Ecological Communities (TEC's) within the application area (GIS Database). The nearest known TEC is approximately 170 kilometres east of the application area (GIS Database). At this distance there is little likelihood of any impact to the TEC as a result of the proposed clearing.

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

**Methodology** 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 is located within the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). Shepherd (2009) reports that approximately 99.89% of the pre-European vegetation remains in the Pilbara bioregion.

The vegetation in the application area has been broadly mapped as Beard vegetation association:

585 - Mosaic: Shrublands; snakewood & *Acacia victoriae* scrub / Hummock grasslands, shrub-steppe; kanji over soft spinifex and *Triodia basedowii*.

According to Shepherd (2009) approximately 100% of Beard vegetation association 585 remains within the Pilbara bioregion (see table below).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Pilbara	17,804,193	17,785,001	~99.89	Least Concern	~6.32
Beard vegetation associations - State					
585	145,571	145,571	~100	Least Concern	~23.45
Beard vegetation associations - Bioregion					
585	144,812	144,812	~100	Least Concern	~23.54

\* Shepherd (2009)

\*\* Department of Natural Resources and Environment (2002)

The vegetation within the application area is not considered to be a remnant of native 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 (2009)  
GIS Database:  
- IBRA WA (regions – subregions)  
- Pre-European Vegetation

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

**Comments Proposal is not at variance to this Principle**

A flora and vegetation survey of the application area was conducted by Native Vegetation Solutions (2011) in July 2011. No vegetation was defined as occurring in association with any permanent or ephemeral wetlands or watercourses (Native Vegetation Solutions, 2011).

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

**Methodology** Native Vegetation Solutions (2011)

**(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 mapped as occurring in the following land systems (GIS Database):

The Capricorn land system is characterised by hills and ridges of sandstone and dolomite supporting shrubby hard and soft spinifex grasslands (Van Vreeswyk et al., 2004). No erosion has been recorded within this land system (Van Vreeswyk et al., 2004).

The Stuart land system is characterised by gently undulating stony plains supporting hard and soft spinifex grasslands and snakewood shrublands (Van Vreeswyk et al., 2004). This land system is generally not susceptible to erosion except for some lower plains and drainage tracts which are slightly to moderately susceptible (Van Vreeswyk et al., 2004).

The Uaroo land system is characterised by broadly sandy plains supporting shrubby hard and soft spinifex grasslands (Van Vreeswyk et al., 2004). This land system is generally not susceptible to erosion except for some occasional erosion evident on drainage tracts (Van Vreeswyk et al., 2004).

Two of the land systems within the application area, Stuart land system and Uaroo land system, have slight to moderate susceptibility to erosion. Potential impacts from erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

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

**Methodology** 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 majority of application lies within the former Mt Minnie leasehold, now proposed conservation reserve (GIS Database). This area is currently managed by the Department of Environment and Conservation (DEC) and is therefore classified as non-permitted under Schedule 1 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. Keith Lindbeck and Associates, on behalf of the applicant, consulted with DEC prior to submitting this clearing permit application to the Department of Mines and Petroleum.

A number of recommendations were given to WA Limestone Co from DEC (2011) including:

- Prevent unauthorised clearing;
- Weed and Hygiene Management;
- Domestic Waste Management;
- Setting up a communication protocol with DEC;
- Develop a Mine Closure Plan in consultation with DEC; and
- Further consultation with DEC for any further proposals or for additional project elements.

The majority of these recommendations will be covered under the relevant *Mining Act 1978* approvals, however, potential weed infestation as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

**Methodology** DEC (2011)  
GIS Database:  
- DEC Tenure

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

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

There are no permanent or ephemeral wetlands or watercourses within the application area (GIS Database). It is therefore considered unlikely that the proposed clearing will impact on the quality of any surface water.

According to available GIS Databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The nearest PDWSA is the Cane River Water Reserve which is located approximately 42 kilometres north of the application area at its closest point (GIS Database). Given the distance separating the application area and the nearest water supply, the proposed clearing is not likely to impact on the quality of the Cane River Water Reserve.

The application area experiences an arid (semi-desert) tropical climate with highly variable rainfall, falling mainly in summer (CALM, 2002). Groundwater within the application area has low salinity levels of between 1,000 to 3,000 milligrams per litre Total Dissolved Solids (TDS) (GIS Database). It is considered unlikely that the proposed clearing of 10.22 hectares of native vegetation within this climate would cause local groundwater salinity levels to alter significantly.

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

**Methodology** CALM (2002)  
GIS Database:  
- Groundwater Salinity, Statewide  
- Hydrography, linear  
- Public Drinking Water Source Area (PDWSA)

**(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 experiences an arid (semi-desert) tropical climate with an average annual rainfall of approximately 326.5 millimetres (BoM, 2011; CALM, 2002). This region is subject to cyclonic activity and sporadic thunderstorm events, during which local flooding is common. It is considered unlikely that the proposed clearing of 10.22 hectares of native vegetation within a broader application area of approximately 176 hectares will cause or exacerbate the incidence or intensity of flooding in this area.

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

**Methodology** BoM (2011)  
CALM (2002)

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

**Comments**

There is one Native Title Claim (WC10/4) over the area under application (GIS Database). This claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of 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 was advertised on 24 October 2011 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received from a direct interest party advising they had no objection to the proposed clearing.

- Methodology** GIS Database:
- Aboriginal Sites of Significance
  - Native Title Claims – Filed at the Federal Court

#### 4. References

- BoM (2011) BoM Website - Climate Averages by Number, Averages for ONSLOW.  
[www.bom.gov.au/climate/averages/tables.shtml](http://www.bom.gov.au/climate/averages/tables.shtml) (Accessed 17 November 2011)
- CALM (Department of Conservation and Land Management) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.
- DEC (2011) Consultation on Conservation Management Plan – WA Limestone Pty Ltd – Mt Minnie Project M08/475 & L08/60. Advice sought by Keith Lindbeck and Associates on behalf of WA Limestone Co.
- 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.
- Keith Lindbeck and Associates (2011a) Application for Clearing Permit (Purpose Permit) - Mt Minnie Project, Twelve Mile Pty Ltd M08/475 & L08/60. Bull Creek, Western Australia.
- Keith Lindbeck and Associates (2011b) WA Limestone Pty Ltd Mt Minnie Quarry Level 1 Fauna Survey. Unpublished Report prepared for WA Limestone Pty Ltd. Bull Creek, Western Australia.
- Native Vegetation Solutions (2011) Level 1 Flora and Vegetation Survey WA Limestone - (M08/475 & L08/60) Onslow. Unpublished Report prepared for Keith Lindbeck and Associates. Kalgoorlie, Western Australia.
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Van Dyck, S. and Strahan, R. (2008) The Mammals of Australia Third Edition. Published by Reed New Holland, Sydney.
- Van Vreeswyk AME, Payne AL, Leighton KA & Hennig P, (2004) Technical Bulletin No. 92: An inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Western Australia.

#### 5. Glossary

##### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia
<b>DoIR</b>	Department of Industry and Resources (now DMP), Western Australia
<b>DOLA</b>	Department of Land Administration, Western Australia
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environmental Protection Act 1986, Western Australia
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>RIWI Act</b>	Rights in Water and Irrigation Act 1914, Western Australia
<b>s.17</b>	Section 17 of the Environment Protection Act 1986, Western Australia
<b>TEC</b>	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.