



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 3504/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Paddington Gold Pty Ltd**

### 1.3. Property details

Property: Mining Leases 26/474, 26/387, 26/420 and 26/430  
Local Government Area: Kalgoorlie-Boulder  
Colloquial name: Navajo Chief Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
100		Mechanical Removal	Mineral Production

## 2. Site Information

### 2.1. Existing environment and information

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

##### Vegetation Description

The vegetation of the application area is broadly mapped as Beard vegetation associations (GIS Database):

- 9:** Medium woodland; coral gum (*Eucalyptus torquata*) & goldfields blackbutt (*Eucalyptus lesouefii*);
- 123:** Succulent steppe with open low woodland; sheoak over saltbush & bluebush;
- 125:** Bare areas; salt lakes; and
- 1294:** Medium woodland; coral gum.

##### Clearing Description

Paddington Gold Pty Ltd (Paddington) have applied for a purpose permit to clear up to 100 hectares of native vegetation. The proposed clearing is for the purposes of mineral production consisting of pits, RoM pad, tracks, pipelines, waste dump, conveyers and post mining abandonment bunds.

##### Vegetation Condition

Very Good: vegetation structure altered; obvious signs of disturbance (Keighery, 1994).  
To  
Completely Degraded: no longer intact; completely/almost completely without native species (Keighery, 1994).

##### Comment

The vegetation condition was derived from a description by Botanica Consulting (2008). Vegetation was altered due to obvious signs of disturbance such as historic tracks and exploration drilling (Botanica Consulting, 2008).

Botanica Consulting (2008) identified eleven broad vegetation groups within a survey area totalling approximately 1,700 hectares including the application area:

- *Eucalyptus oleosa* Woodland;
- *Eucalyptus ravida* Woodland;
- *Eucalyptus clelandii* Woodland;
- *Acacia acuminata* Shrubland;
- *Eucalyptus griffithsii* Woodland;
- *Eucalyptus lesouefii* Woodland over Breakaway;
- *Eucalyptus transcontinentalis* Woodland;
- Samphire Shrubland;
- Kopi Dunal Vegetation;
- Marble Gum Over Spinifex; and
- Chenopod Shrubland.

### 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 Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Eastern Goldfields subregion is characterised by Mallees, Acacia thickets and shrubheaths on sandplains (CALM, 2002). Diverse Eucalyptus woodlands occur around salt lakes, on ranges and in valleys, and salt lakes support dwarf shrublands of samphire (CALM, 2002). The area is rich in endemic Acacias (CALM, 2002).

Eleven broad vegetation groups were identified within a survey area totalling approximately 1,700 hectares including the application area (Botanica Consulting, 2008):

- *Eucalyptus oleosa* Woodland;
- *Eucalyptus ravida* Woodland;
- *Eucalyptus clelandii* Woodland;
- *Acacia acuminata* Shrubland;
- *Eucalyptus griffithsii* Woodland;
- *Eucalyptus lesouefii* Woodland over Breakaway;
- *Eucalyptus transcontinentalis* Woodland;
- Samphire Shrubland;
- Kopi Dunal Vegetation;
- Marble Gum Over Spinifex; and
- Chenopod Shrubland.

These groups were represented by a total of 28 Families, 51 Genera and 116 Species (Botanica Consulting, 2008). Given that the Eastern Goldfields are considered to have high species and ecosystem diversity the survey area appears to reciprocate the diversity of the bioregion without surpassing it.

In terms of fauna habitat diversity, GHD Pty Ltd (2009) stated that “woodland over mixed shrubs” contained relatively good structural diversity, however, “scrublands” contained lower structural diversity.

The survey area retains no regional environmental significance as defined by the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* (Botanica Consulting, 2008). There were no Priority Ecological Communities or Threatened Ecological Communities as defined by the Department of Environment and Conservation found within the survey area (Botanica Consulting, 2008). Five weed species were recorded in the survey area. None of these plants are classified as Declared weeds under the *Agriculture and Related Resources Protection Act 1976* (Botanica Consulting, 2008)

Based on Keighery (1994), the condition of the *Eucalyptus griffithsii* Woodland and *Eucalyptus transcontinentalis* Woodland was “very good” whilst the remaining nine vegetation groups within the survey area were classed as being in a “good” health condition (Botanica Consulting, 2008). Areas that had suffered from previous mining activities were “totally degraded” (Botanica Consulting, 2008).

There were no Declared Rare Flora (DRF) species listed in the *Wildlife Conservation (Rare Flora) Notice 2008*, or Priority Flora species listed with the Department of Environment and Conservation (DEC) identified within the application area (Botanica Consulting, 2008). One Priority 3 flora species occurred near the south-eastern corner of the application area (Botanica Consulting, 2008).

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

**Methodology** Botanica Consulting (2008)  
CALM (2002)  
GHD Pty Ltd (2009)  
GIS Database:  
- Interim Biogeographic Regionalisation for Australia  
- Interim Biogeographic Regionalisation for Australia (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**

GHD Pty Ltd (2009) conducted a Level 1 fauna survey over the application area.

Three broad fauna habitat types were identified within the survey area:

- Woodland over mixed shrubs;

- Scrublands; and
- Pits and cleared areas.

#### **Woodland over mixed shrubs**

The woodland over mixed shrubs habitat is considered to provide a medium level of habitat value to fauna. The vegetation has relatively good structural diversity with medium sized eucalypts, mallees and a healthy understorey of small and larger shrubs present. Such heterogeneity within the habitat provides a range of ecological niches for vertebrate fauna, particularly bird species. Pockets of dense litter were also observed within this habitat unit (GHD Pty Ltd, 2009).

#### **Scrublands**

The shrubland habitat present is generally less diverse (both structurally and floristically) than the woodland habitat, the vegetation present was in good condition and is considered to provide a medium level of habitat to fauna (GHD Pty Ltd, 2009).

#### **Pits and cleared areas**

The pits and cleared areas (operational areas, haul roads, roads, etc) are highly disturbed, devoid of vegetation and offer little habitat value for fauna. The species diversity for all taxonomic groups is likely to be very limited in this habitat type (GHD Pty Ltd, 2009).

#### **Habitat Linkages**

Habitat linkages are important to allow animals to move between areas of resource availability. Habitat linkage is important for ground and aerial fauna, providing cover, resources, and linking areas suitable for rest and reproduction. The application area is surrounded by relatively intact vegetation and is not considered to constitute a significant corridor or habitat linkage for fauna (GHD Pty Ltd, 2009).

GHD Pty Ltd (2009) determined that the fauna habitats within the application area are well represented in the local and regional landscape. Clearing associated with this proposal will result in some habitat loss for fauna, including fauna of conservation significance, but no fauna species are likely to be specifically reliant on the vegetation of the application area (GHD Pty Ltd, 2009).

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

**Methodology** GHD Pty Ltd (2009)

### **(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**

A search of the Department of Environmental and Conservation's (DEC's) Rare and Priority Flora Database revealed no records of Declared Rare Flora (DRF) in proximity to the application area (Botanica Consulting, 2008).

Botanica Consulting (2008) conducted a flora and vegetation survey of 1,700 hectares surrounding and including the application area. There were no DRF species listed in the *Wildlife Conservation (Rare Flora) Notice 2008*, or Priority Flora species listed with the Department of Environment and Conservation (DEC) identified within the application area (Botanica Consulting, 2008). One Priority 3 flora species occurred near the south-eastern corner of the application area (Botanica Consulting, 2008). Given that none of these plants were recorded in the application area it is unlikely that the vegetation of the application area would be necessary for the continued existence of this species.

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

**Methodology** Botanica Consulting (2008)

### **(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 databases there are no Threatened Ecological Communities (TEC's) within 100 kilometres of the application area (GIS Database).

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 application area is located within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). Shepherd (2007) report that approximately 98.4% of the pre-European vegetation still exists in the Coolgardie bioregion.

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

- **9:** Medium woodland; coral gum (*Eucalyptus torquata*) & goldfields blackbutt (*Eucalyptus lesouefii*);
- **123:** Succulent steppe with open low woodland; sheoak over saltbush & bluebush;
- **125:** Bare areas; salt lakes; and
- **1294:** Medium woodland; coral gum.

According to Shepherd (2007) there is approximately 99% remaining of all the abovementioned Beard vegetation types remaining in the Coolgardie bioregion.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA bioregion – Coolgardie	12,912,204	12,707,619	~ 98.4	Least Concern	10.87
<b>Beard veg assoc. – State</b>					
9	240,509	239,895	~ 100	Least Concern	1.3
123	9,090	9,090	~ 100	Least Concern	0
125	3,489,858	3,246,667	~ 93	Least Concern	7.2
1294	6,296	6,296	~ 100	Least Concern	1.8
<b>Beard veg assoc. – bioregion</b>					
9	240,442	239,835	~ 99.7	Least Concern	1.3
123	9,090	9,090	~ 100	Least Concern	0
125	543,774	540,608	~ 99.4	Least Concern	4.5
1294	6,296	6,296	~ 100	Least Concern	1.8

\* Shepherd (2007)

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

Although several large scale mining operations are located within a 50 kilometre radius of the application area (GIS Database), on a broader scale the Coolgardie bioregion has not been extensively cleared. Hence the application area is not considered to represent a significant remnant of native vegetation in an area that has been extensively cleared.

Botanica Consulting (2008) have stated that the vegetation within the survey area is not considered to be significant as a remnant of native vegetation that has been extensively cleared.

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

**Methodology** Botanica Consulting (2008)  
 Department of Natural Resources and Environment (2002)  
 Shepherd (2007)  
 GIS Database:  
 - Interim Biogeographic Regionalisation of Australia  
 - Pre-European Vegetation

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

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

The southern portion of the application area abuts an ephemeral salt lake (GIS Database). Two vegetation groups have been recorded as growing in association with the salt lake (Botanica Consulting, 2008):

- Samphire shrubland; and
- Chenopod shrubland.

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

Although there are two vegetation groups within the application area that are associated with a salt lake, the area has been heavily disturbed from historic mining activities including pits, wastedumps and roads. Therefore, most of the vegetations conservation value has been lost (Botanica Consulting, 2008). Furthermore, both vegetation groups are well represented outside of the application area immediately to the south and seven kilometres to the north-east. (Botanica Consulting, 2008).

**Methodology** Botanica Consulting (2008)  
GIS Database  
- Hydrography, lakes  
- 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 proposed clearing is for mining purposes and includes expanding an open pit, waste rock stockpile and RoM pad (Paddington, 2009). Therefore, most of the clearing will not be susceptible to wind erosion. To mitigate potential land degradation as a result of the proposed clearing a staged clearing condition may be placed on the permit. This will reduce the potential for cleared areas to be left open for lengthy periods without appropriate use.

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

**Methodology** Paddington (2009)  
GIS Database  
- Hydrology, linear

**(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 Kurrawang Nature Reserve is located approximately 300 metres west of the application area (GIS Database). This C-Class reserve is vested with the Conservation Commission. Botanica Consulting (2008) have stated that provided the proposed clearing is localised to within the application area there should not be any affect to the Kurrawang Nature Reserve. Furthermore, mining has been in operation in the locality for numerous years; and therefore it could be assumed that further any impacts to the environmental values of the reserve would be limited.

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

**Methodology** Botanica Consulting (2008)  
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**

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database).

There are no permanent watercourses or water bodies within the application area other than old mine voids. Therefore impacts to surface water would be considered unlikely. Additionally, the area receives an average rainfall of approximately 300 millimetres per year (GIS Database) and experiences a pan evaporation rate of approximately 3600 millimetres per year resulting in little surface water flow during normal seasonal rains.

Groundwater in the application area is generally saline, with between 14,000 to 45,000 milligrams per litre of Total Dissolved Solids. It is unlikely the proposed clearing will result in all incremental increase in groundwater

salinity.

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

- Methodology** GIS Database
- Groundwater salinity, State wide
  - Hydrography, linear
  - Mean Annual Rainfall Isohyets
  - Public Drinking Water Source Area

**(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 proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding for the following reasons:

- low annual rainfall of approximately 300 millimetres rainfall per year (GIS Database);
- high evaporation rates of approximately 3600 millimetres rainfall per year (GIS Database);
- gently undulating topography (GIS Database); and
- lack of standing waterbodies or watercourses (GIS Database).

The southern edge of the application area overlaps with an ephemeral salt lake (GIS Database). Salt lakes in this region fill up following intense rainfall events effectively flooding the local landscape. It is unlikely that the proposed clearing will result in an incremental increase in duration or frequency of these events.

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

- Methodology** GIS database
- Hydrography, linear
  - Topographic Contours, Statewide

**Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.**

**Comments**

The clearing permit application was advertised on 28 December 2009 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the application area. This claim (WC98-027) has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenements has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. 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*.

According to available databases there are no 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 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.

- Methodology** GIS Databases:
- Aboriginal Sites of Significance
  - Native Title Claims

**4. Assessor's comments**

**Comment**

The proposal has been assessed against the Clearing Principles, and the proposed clearing is at variance to Principle (f), is not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i) 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 staged clearing, weed management, record keeping and permit reporting.

## 5. References

- Botanica Consulting (2008) Binduli Flora and Vegetation Survey, Unpublished report for Norton Gold Field Limited, Boulder, Western Australia.
- CALM (2002). A biodiversity audit of Western Australia's 53 biogeographical subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- GHD Pty Ltd (2009) Report for Navajo Chief Development Activities Level 1 Fauna Assessment, Unpublished report for Paddington Gold Pty Ltd.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Paddington (2009) supporting documentation for clearing permit application CPS 3502/1.
- 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.

## 6. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government.
<b>CALM</b>	Department of Conservation and Land Management, Western Australia.
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia.
<b>DA</b>	Department of Agriculture, Western Australia.
<b>DEC</b>	Department of Environment and Conservation
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DoE), 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, Western Australia.
<b>DoIR</b>	Department of Industry and Resources, Western Australia.
<b>DOLA</b>	Department of Land Administration, Western Australia.
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environment 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>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</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>TECs</b>	Threatened Ecological Communities.

### Definitions:

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

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

Environment, after recommendation by the State's Endangered Flora Consultative Committee.

- X Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

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

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

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

- P1 Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2 Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3 Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4 Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5 Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

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

- EX Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W) Extinct in the wild:** A native species which:  
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or  
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN Endangered:** A native species which:  
(a) is not critically endangered; and  
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU Vulnerable:** A native species which:  
(a) is not critically endangered or endangered; and  
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.