



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 3878/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

### 1.3. Property details

Property: Iron Ore (Mount Bruce) Agreement Act 1972, Mineral Lease 252SA (AML70/252)  
Local Government Area: Shire of East Pilbara  
Colloquial name: Koodaideri Borrow Pits and Landfill

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
28		Mechanical Removal	Borrow Pit and Landfill Site Construction

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 17 February 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 at a 1:250,000 scale for the whole of Western Australia and are useful to look at vegetation in a regional context. The following Beard Vegetation Associations have been mapped within the application area (GIS Database):

82: Hummock grasslands, low tree steppe; snappygum over *Triodia wiseana*;

111: Hummock grasslands, shrub steppe; *Eucalyptus gamophylla* over hard spinifex.

A flora and vegetation survey of the application and surrounding areas was conducted by Biota Environmental Sciences between May and October 2007. Based on the information provided, the application area potentially contains the following vegetation communities (Biota Environmental Sciences, 2008):

##### Gentle lower slopes/foot slopes

*Eucalyptus leucophloia*, *Hakea chordophylla* scattered low trees over *Solanum phlomoides*, *Goodenia stobbsiana* low shrubland over *Triodia sp.*  
*Shovelanna Hill* hummock grassland;

##### Undulating plains

*Eucalyptus leucophloia*, *Hakea chordophylla* scattered low trees over *Acacia bivenosa* open shrubland over *Goodenia stobbsiana*, *Ptilotus astrolasius* scattered low shrubs over *Triodia wiseana* hummock grassland;

*Grevillea wickhamii*, *Acacia inaequilatera* tall shrubland over *Acacia ancistrocarpa*,

##### Clearing Description

Hamersley Iron Pty Ltd has applied to clear up to 28 hectares within approximately 103.8 hectares (GIS Database). The application area is located approximately 78 kilometres south-east of Wittenoom (GIS Database).

The proposed clearing is for the purpose of constructing three borrow pits and a landfill site. Clearing will be by mechanical means.

##### Vegetation Condition

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

to

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

##### Comment

Clearing permit CPS 3878/1 was granted by the Department of Mines and Petroleum on 7 October 2010, and is valid from 6 November 2010 to 31 December 2017. The clearing permit authorised the clearing of 28 hectares of native vegetation. An application for an amendment to clearing permit CPS 3878/1 was submitted by Hamersley Iron Pty Ltd on 7 January 2011. The proponent has requested a change to the purpose of the clearing to include the addition of a landfill site. No increase in size is required to the area to be cleared or the boundary of the approved clearing area. There were no additional environmental impacts as a result of this amendment.

The vegetation condition was assessed by botanists from Biota Environmental Sciences. The vegetation condition was described using a scale based on Trudgen (1988) and has been converted to the corresponding condition from the Keighery (1994) scale.

*Cassia glutinosa* open shrubland over  
*Cassia helmsii*, *Cassia oligophylla*  
scattered low shrubs over *Triodia*  
*pungens* hummock grassland;

*Eucalyptus leucophloia* scattered low  
trees over *Acacia rhodophloia*, *Acacia*  
*pruinocarpa*, tall shrubland over  
*Eremophila latrobei* scattered shrubs over  
*Triodia wiseana*, *Triodia sp.* *Shovelanna*  
Hill open hummock grassland;

#### **Floodplains near creeks**

*Acacia pyrifolia*, *Acacia tumida*,  
*Gossypium robinsoni* tall open scrub over  
*Tephrosia rosea* low open shrubland over  
*Cenchrus ciliaris* closed tussock  
grassland; and

#### **Narrow drainage lines**

*Eucalyptus gamophylla* scattered low  
mallees over *Acacia tumida*, *Petalostylis*  
*labicheoides*, *Gossypium robinsoni* tall  
closed scrub.

### **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**

A flora and vegetation survey has identified that there are potentially six different vegetation communities within the application area. The condition of the vegetation ranged from 'excellent' to 'good' (Biota Environmental Sciences, 2008).

The flora survey of the application and surrounding areas recorded a total of 169 flora species from 82 genera and 38 families (Biota Environmental Sciences, 2008). These numbers are within the expected range for a survey area of its size in the inland Pilbara and are not considered to represent high species richness (Biota Environmental Sciences, 2008). In addition there were two weeds recorded during the survey; Buffel Grass (*Cenchrus ciliaris*) and Bipinnate Beggartick (*Bidens bipinnata*) (Biota Environmental Sciences, 2008). No Declared Rare Flora or Priority Flora was recorded within the application area (Biota Environmental Sciences, 2008).

The application area is within the buffer zone of the Fortescue Marsh Priority Ecological Community (PEC) (GIS Database). The application area is over 10 kilometres from the Fortescue March itself and the vegetation communities recorded are not representative of this PEC (GIS Database). The proposed clearing is not likely to impact the Fortescue Marsh PEC.

There have been two Western Pebble-mound Mouse (*Pseudomys chapmani* – Priority 4) mounds recorded within the application area (Biota Environmental Sciences, 2008). Several other fauna species of conservation significance have the potential to occur within the application area. However, the fauna habitat present within the application area is common and widespread through the Hamersley subregion and the application area is not likely to possess a higher level of faunal diversity than surrounding areas.

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

**Methodology** Biota Environmental Sciences (2008)  
GIS Database  
- ANCA, Wetlands  
- Threatened Ecological Sites Buffered

#### **(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**

Biota Environmental Sciences (2008) conducted a desktop fauna assessment of the application area and surrounding vegetation. Fauna habitats were also assessed during a site visit by Biota Environmental Sciences in August 2007. The fauna habitats identified by this visit were hilltops, hillslopes and stony plains (Biota Environmental Sciences, 2008). It is not likely that the hilltops habitat is present within the application area and the stony plains habitat is expected to be prevalent. All habitats are incised by drainage features and are characteristic of habitats from the Hamersley subregion (Biota Environmental Sciences, 2008).

The desktop assessment identified 18 fauna species of conservation significance that could potentially occur within the application area (Biota Environmental Sciences, 2008). There were two Western Pebble-mound

Mouse (*Pseudomys chapmani* – Priority 4) mounds recorded within the application area (Biota Environmental Sciences, 2008). One of the mounds was identified as being inactive and the other was possibly active (Biota Environmental Sciences, 2008). Similar habitat for the Western Pebble-mound Mouse is common throughout the Pilbara and given the relatively small area of habitat proposed to be cleared, the impact on this species is not likely to be significant.

The application area may be utilised by several other fauna species of conservation significance, however, the habitat present is common and widespread throughout the Hamersley subregion and is not likely to represent significant habitat for indigenous fauna.

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 databases, there are no known records of Declared Rare Flora (DRF) within the application area (GIS Database). Biota Environmental Sciences (2008) conducted a flora survey over the application area between May and October 2007. No DRF was recorded during this survey (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 databases, there are no Threatened Ecological Communities (TEC's) within the application area (GIS Database). Biota Environmental Sciences (2008) conducted a vegetation survey over the application area between May and October 2007. No TEC's were identified during this survey (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  
- Threatened Ecological Sites Buffered

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

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

The application area falls within the Pilbara Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 99.9% of the Pre-European vegetation remains (see table) (GIS Database, Shepherd, 2009).

The vegetation of the application area has been mapped as the following Beard vegetation associations (GIS Database):

82: Hummock grasslands, low tree steppe; snappygum over *Triodia wiseana*; and  
111: Hummock grasslands, shrub steppe; *Eucalyptus gamophylla* over hard spinifex.

According to Shepherd (2009) approximately 100% of these Beard vegetation associations remains at both a state and bioregional level. Therefore the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion – Pilbara	17,804,193	17,785,001	~99.9	Least Concern	8.3
Beard veg assoc. – State					
82	2,565,901	2,565,901	~100	Least Concern	10.2
111	762,964	762,964	~100	Least Concern	5.5
Beard veg assoc. – Bioregion					
82	2,563,583	2,563,583	~100	Least Concern	10.2
111	550,287	550,287	~100	Least Concern	1.3

\* Shepherd (2009)

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

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

**Methodology** Department of Natural Resources and Environment (2002)  
Shepherd (2009)  
GIS Database  
- IBRA WA (Regions - Sub Regions)  
- Pre-European Vegetation

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

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

According to available databases, there are several minor, non-perennial watercourses within the application area (GIS Database). An assessing officer has previously visited areas adjacent to the application area and noted that watercourses present are seasonally dry ephemeral watercourses with no riparian vegetation fringing their banks. These watercourses would experience high, rapid flows during intense rainfall associated with the wet season, but would be dry for the rest of the year. Many of the watercourses within the application area are dominated by Buffel Grass (*Cenchrus ciliaris*) and therefore, the ability of the vegetation to act as a buffer to the watercourse would be reduced (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  
- 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 available databases, the application area is comprised of the Boolgeeda and Newman land systems (GIS Database). Both of these land systems are generally not prone to erosion (Van Vreeswyk et al., 2004). However, the stony slopes and plains landform of the Boolgeeda land system may be vulnerable to erosion if disturbed (DAFWA, 2006). Based on available information this landform is most likely present within parts of the application area (Van Vreeswyk et al., 2004; GIS Database). Potential impacts to erosion may be minimised by the implementation of a rehabilitation condition.

At a broad scale, the surface soil pH in the application area ranges from 5.5 to 6.0 and there is no known occurrence of acid sulphate soils (CSIRO, 2009). The average annual evaporation rate is over eight times the average annual rainfall, so it is unlikely the proposed clearing will result in increased groundwater recharge causing raised saline water tables (GIS Database).

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

**Methodology** CSIRO (2009)  
DAFWA (2006)  
Van Vreeswyk et al. (2004)  
GIS Database  
- Evaporation Isopleths  
- Rainfall, Mean Annual

- Rangeland Land System Mapping
- Weeli Wooli 50cm Orthomosaic - Landgate 2004

**(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 may be at variance to this Principle**

According to available databases, the application area is located within Marilana Station (GIS Database). Marilana Station is a proposed DEC 2015 pastoral lease exclusion. Whilst the proposed clearing is within this conservation area, it is not likely to impact on significant areas such as gorges and permanent wetlands. The proposed Marilana Station 2015 exclusion area is over 54,000 hectares (GIS Database). The proposed clearing of 28 hectares is not likely to have significant impacts on the environmental values of the Marilana Station.

Impacts on this conservation area may be minimised by the implementation of a rehabilitation condition and restricting clearing to before 2015.

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

- Methodology** GIS Database
- DEC proposed 2015 pastoral lease exclusions
  - DEC Tenure

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

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

According to available databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). There are no permanent watercourses within the application area (GIS Database). There are several minor non-perennial watercourses that intersect the application area (GIS Database). Some of the watercourses within the application area are dominated by Buffel Grass (*Cenchrus ciliaris*) and have been degraded by grazing (Biota Environmental Sciences, 2008).

The annual average rainfall for the application area is 400 millimetres and the average annual evaporation rate is 3,400 millimetres (GIS Database). Therefore, during normal rainfall events surface water within the application area is likely to evaporate quickly. However, substantial rainfall events create surface sheet flow which is likely to have a higher level of sediments. During normal rainfall events, the proposed clearing would not likely lead to an increase in sedimentation of watercourses within the application area.

The groundwater salinity within the application area is between 500 – 1,000 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). This is considered to be potable water. The proposed clearing is not likely to cause salinity levels within the application area to alter.

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

- Methodology** Biota Environmental Sciences (2008)
- GIS Database
  - Evaporation Isopleths
  - Groundwater Salinity, Satewide
  - Hydrography, linear
  - Public Drinking Water Source Areas (PDWSA's)
  - Rainfall, Mean Annual

**(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**

With an average annual rainfall of 400 millimetres and an average annual evaporation rate of 3,400 millimetres there is likely to be little surface flow during normal seasonal rains (GIS Database). Whilst large rainfall events may result in the flooding of the area, the proposed clearing is not likely to lead to an increase in the incidence or intensity of flooding.

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

- Methodology** GIS Database
- Evaporation Isopleths
  - Rainfall, Mean Annual

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

### Comments

There is one native title claim over the area under application (GIS Database). This claim (WC99/004) has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). 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*.

According to available databases, there is one 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 proposed works.

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

## 4. References

- Biota Environmental Sciences (2008) Koodaideri Camp & Infrastructure Areas: Native Vegetation Clearing Permit Report. Unpublished report for Pilbara Iron Company, February 2008.
- Commonwealth Scientific and Industrial Research Organisation (2009) Australian Soil Resource Information System. Available online at: [http://www.asris.csiro.au/index\\_ie.html](http://www.asris.csiro.au/index_ie.html) Accessed on 16 September 2010.
- DAFWA (2006) Land degradation assessment report for clearing permit application CPS 1250/1. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia, dated 6 November 2006.
- 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.
- 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.
- Trudgen M.E. (1988) A Report on the Flora and Vegetation of the Port Kennedy Area. Unpublished report prepared for Bowman Bishaw and Associates, West Perth.
- Van Vreeswyk, A.M, Payne, A.L, Leighton, K.A & Hennig, P (2004) Technical Bulletin No. 92: An inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, South Perth, Western Australia.

## 5. 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.