



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4382/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Kagara Nickel Pty Ltd

### 1.3. Property details

Property: Mining Lease 77/545  
Local Government Area: Shire of Kondinin  
Colloquial name: Forrestania Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 7 July 2011

## 2. Site Information

### 2.1. Existing environment and information

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

<b>Vegetation Description</b>	<p>Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations are located within the application areas (GIS Database):</p> <p><b>Beard vegetation association 511:</b> medium woodland; Salmon Gum and Morrel; and</p> <p><b>Beard vegetation association 2048:</b> shrublands; scrub-heath in the Mallee region.</p> <p>A flora and vegetation survey of the application areas was conducted by Botanica Consulting in June 2010. This survey identified two vegetation groups within the application areas (Botanica Consulting, 2010):</p> <p><b>Mallee Woodland</b> The flora in this vegetation group was representative of burnt Mallee woodland. The over-storey was dominated by <i>Eucalyptus platycorys</i> with some occurrences of <i>Eucalyptus</i> sp. (sterile) populations. The mid-storey was dominated by <i>Exocarpos sparteus</i> and <i>Acacia eremophila</i>. The understorey was dominated by <i>Boronia inornata</i> subsp. <i>inornata</i> and <i>Daviesia</i> sp. (sterile).</p> <p><b>Acacia Thicket</b> The flora recorded in this vegetation group was representative of <i>Acacia</i> thicket and shrubland. The upper canopy contained <i>Acacia enervia</i> and juvenile <i>Eucalyptus eremophila</i>. The mid storey contained <i>Cryptandra minutifolia</i> and <i>Thryptomene kochii</i>, the lower storey contained <i>Darwinia inconspicua</i> and <i>Phebalium filifolium</i>.</p>
<b>Clearing Description</b>	<p>Kagara Nickel Pty Ltd (Kagara Nickel) proposes to clear up to 1 hectare of native vegetation (Kagara Nickel, 2011). The application areas are located approximately 8 kilometres east of Hyden (GIS Database).</p> <p>The purpose of the proposed clearing is exploration (Kagara Nickel, 2011). Vegetation will be cleared by a backhoe or front-end loader and drill sites will be cleared progressively as they are required (Kagara Nickel, 2011).</p>
<b>Vegetation Condition</b>	<p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).</p>
<b>Comment</b>	<p>The vegetation condition rating is derived from a flora and vegetation survey conducted by Botanica Consulting in June 2010. Botanica Consulting (2010) and Kagara Nickel (2011) state that this area has previously been drilled and the proposal will re-establish old drill lines. This is supported by aerial imagery that shows old drill lines within the application areas.</p>

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

The application areas are located within the Southern Cross subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Western Mallee subregion of the Mallee IBRA bioregion (GIS Database). This area between the two subregions is described as the interzone between the South West and Eremaean Botanical Provinces (Thackway and Cresswell, 1995 as cited in EPA, 2009). The transitional rainfall zone (interzone) between the South Western Australian Floristic Region and Eremaean Botanical Province contains the limits of distribution patterns for many plants and plant communities of the Goldfields and Wheatbelt regions (CALM, 2002).

A flora and vegetation survey was conducted over the proposed clearing areas in June 2010. This survey identified a total of 17 families, 32 genera and 56 species (Botanica Consulting, 2010). These figures appear quite low considering that the region is known to be biologically diverse. This could be attributed to the relatively small area surveyed, the proximity to an existing mine site and prior disturbance in the form of previous exploration and fire.

No weed species were recorded within the application areas during the flora and vegetation survey (Botanica Consulting, 2010). The presence of weed species lowers the biodiversity value of the proposed clearing areas. It is important to ensure that the proposed clearing activities do not spread or introduce weed species to non-infected areas. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No Declared Rare Flora were recorded within the survey area (Botanica Consulting, 2010). A Priority 4 flora species; *Microcorys* sp. *Forrestania* occurs within the application areas. It has been stated that 148 plants will be impacted upon out of an estimated 2,949 plants in the local population and 14,667 plants within a 20 kilometre area (DEC, 2011). Permission has been given by the DEC (2011) for the removal of 148 *Microcorys* sp. *Forrestania* plants as the DEC states that, 'given the representation of the species within the project area (5% of known plants) and regionally, the proposed impact (<1% of known plants) is not considered significant to the conservation of the species overall or at a population level'.

No Threatened Ecological Communities were recorded within the application areas, however, the proposed clearing areas are located within the Ironcap Hills Vegetation Complex, Priority 3 Ecological Community (Botanica Consulting, 2010). The vegetation complexes associated with these banded ironstone formations are known to have similar flora richness to other Goldfield ranges but are much richer in local endemic species (Gibson, 2004). Due to the effects of prior exploration, mining, clearing and fire disturbance, the application areas are expected to have a lower diversity than other undisturbed vegetation nearby. One Priority 4 flora species; *Microcorys* sp. *Forrestania*, was recorded within the application area, however, Kagara Nickel has obtained permission from the DEC to remove 148 of these plants (Botanica Consulting, 2010). Given the above, the proposed clearing of 1 hectare of native vegetation, spread across several narrow drill lines, is unlikely to affect the conservation status of this PEC.

The EPA provided advice on the conservation values of the Lake Cronin region in 2009. This assessment has found the area to be rich and diverse in fauna, in particular, the amphibian community is the richest known in the Eastern Goldfields. This has been related to Lake Cronin itself which is both freshwater and semi-permanent, and its associated drainage areas (EPA, 2009). The EPA (2009) has also stated that the region is rich and diverse in reptile and bird species and is relatively rich in mammal species. Given the application areas previous disturbance, the proximity to an existing mine site, and that there are no watercourses or wetlands within the proposed clearing areas, it is considered unlikely that the proposed clearing of 1 hectare of vegetation, spread across several narrow drill lines, will significantly impact the diversity of fauna within the region.

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

##### Methodology

Botanica Consulting (2010)  
CALM (2002)  
DEC (2011)  
EPA (2009)  
Gibson (2004)  
GIS Database:  
- IBRA WA (Regions - Subregions)

#### (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**

Fauna surveys have previously been conducted over the Lake Cronin area and the EPA prepared a report that reviewed the conservation values of the area in 2009. These prior assessments have found that the habitats of the Lake Cronin region support rich and diverse fauna and are particularly important due to the amount of widespread clearing that has occurred in the surrounding farmland of the Wheatbelt (EPA, 2009).

The clearing application proposes to clear 1 hectare of vegetation across several drill lines. The proposed exploration is in close proximity to an existing minesite and pit and the exploration will re-establish old exploration tracks (Botanica Consulting 2010). Given the above, and considering that the proposed clearing of 1 hectare will be spread across approximately 2.5 kilometres of track, the proposal is unlikely to have a significant impact on any fauna habitat.

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

**Methodology** Botanica Consulting (2010)  
EPA (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**

Botanica Consulting (2010) conducted a Level 1 flora and vegetation survey over the application areas in April 2010.

No Declared Rare Flora species were recorded within the application areas during the flora assessment (Botanica Consulting, 2010).

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

**Methodology** Botanica Consulting (2010)

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

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

There are no known Threatened Ecological Communities (TECs) within the areas applied to clear (GIS Database). The nearest known TEC is located approximately 125 kilometres south-west of the application areas (GIS Database).

Botanica Consulting (2010) reports that no TECs were identified within the survey area during the flora and vegetation survey.

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

**Methodology** Botanica Consulting (2010)  
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 likely to be at variance to this Principle**

The application areas fall within the Coolgardie and Mallee Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). Shepherd (2009) reports that approximately 98.4% of the pre-European vegetation still exists within the Coolgardie bioregion and approximately 55.7% of the pre-European vegetation still exists within the Mallee bioregion (see table below). The vegetation within the application areas is recorded as the following Beard vegetation associations (Shepherd, 2009):

**Beard vegetation association 511:** medium woodland; Salmon Gum and Morrel; and

**Beard vegetation association 2048:** shrublands; scrub-heath in the Mallee region.

Beard vegetation association 511 is only present within the section of application area that falls within the Coolgardie bioregion, as indicated by the table below. According to Shepherd (2009) over 90% of this vegetation association still exist within the Coolgardie bioregion (see table below). Within the Mallee bioregion and Western Mallee subregion, vegetation association 2048 is classified as Depleted with approximately 48.6% remaining at both bioregion and subregion level. However, this vegetation association is quite well represented within nature reserves with 24% of this association protected in reserves at the subregion level and approximately 15.5% at the bioregion level.

Given that the proposal is for 1 hectare of clearing across both the Coolgardie and Mallee bioregions, it is expected that the total area of clearing within Depleted vegetation associations will be minimal.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves (and post clearing %)
IBRA Bioregion - Coolgardie	12,912,204	12,707,873	~98.4	Least Concern	~10.9
IBRA Bioregion - Mallee	7,395,897	4,115,655	~55.7	Least Concern	~18 (30.7)
IBRA Subregion - Western Mallee	3,981,718	1,412,907	~35.5	Depleted	~10 (24.1)
Local Government - Kondinin	741,930	389,733	~52.5	Least Concern	n/a
Beard vegetation associations - State					
511	700,410	499,600	~71.3	Least Concern	14.1 (18.7)
2048	322,220	158,540	~49.2	Depleted	7.6 (15.0)
Beard vegetation associations - Bioregion - Coolgardie					
511	464,424	435,794	~93.8	Least Concern	~17.5
2048	4,379	4,379	~100	Least Concern	~3.5
Beard vegetation associations - Bioregion - Mallee					
2048	313,728	152,545	~48.6	Depleted	~7.75 (15.5)
Beard vegetation associations - subregion - Western Mallee					
2048	313,693	152,510	~48.6	Depleted	~10 (24)

\* Shepherd (2009)

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

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

**Methodology** Department of Natural Resources and Environment (2002)  
Shepherd (2009)  
GIS Database:  
- IBRA WA (Regions - Subregions)

**(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**

According to available databases there are no watercourses or wetlands within the proposed clearing areas (GIS Database).

Botanica Consulting (2010) reports that there was no vegetation growing in, or in association with, a watercourse or wetland within the application areas.

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

**Methodology** Botanica Consulting (2010)  
GIS Database:  
- Hydrography, linear

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

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

The application areas fall within the Southern Cross subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Western Mallee subregion of the Mallee IBRA bioregion (GIS Database). Both these subregions can contain soils and features that could be susceptible to erosion, such as sand plains and sand sheets, whilst other features are likely to be resistant to erosion (CALM, 2002).

Given the temporary nature of the proposed clearing, and that the clearing will be occurring across several narrow drill lines in an already disturbed area, it is considered unlikely that the removal of 1 hectare of native vegetation will exacerbate or cause appreciable land degradation.

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

**Methodology** CALM (2002)  
GIS Database:  
- IBRA WA (Regions - Subregions)

**(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 application areas are located within a Register of National Estate site for the Lake Cronin area and the Windich Spring Redbook Area (GIS Database).

The Lake Cronin region supports extensive shrubland, sandplain and woodland environments, including excellent representation of a range of vegetation types that are now extensively cleared in the Wheatbelt (EPA, 2009). Due to this, the region possesses significant values in terms of wetland, flora and fauna habitat (EPA, 2009).

The Lake Cronin area was recommended for conservation in 1975 (an area that included the application areas), however, due to competing interests only a relatively small area consisting of 1015 hectares around the lake was gazetted as a formal Nature Reserve in 1980 (EPA, 2009). This Lake Cronin Nature Reserve lies approximately 5.5 kilometres north-east of the application area (GIS Database). The values of the Lake Cronin area were reviewed in 1990, whereupon it was recommended that the values could best be protected by the establishment of a large reserve consisting of approximately 113,250 hectares (EPA, 2009). This recommendation has not been enacted to date (EPA, 2009). The application areas currently fall within an area that has been proposed to be managed under section 32 (2) of the *Conservation and Land Management Act 1984* but not formally reserved (EPA, 2009).

The application areas have previously undergone exploration and therefore, the proposed clearing is to reinstate old drill lines. The proposed exploration is also in close proximity to an existing mine site and pit, with several of the drill lines immediately adjacent to the pit. Given this prior and existing disturbance, it is unlikely that the proposed clearing of 1 hectare of native vegetation in narrow, linear lines, will have a significant impact upon the conservation values of the Lake Cronin region or any other conservation areas.

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

**Methodology** EPA (2009)  
GIS Database:  
- DEC Tenure  
- Register of National Estate  
- System 1 to 5 and 7 to 12 Areas

**(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 watercourses or waterbodies within the application areas (GIS Database).

Given that the application is to clear 1 hectare of native vegetation across several narrow drill lines, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water.

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

**Methodology** GIS Database:  
- Hydrography, linear

**(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**

According to available databases there are no wetlands or watercourses within the proposed clearing areas (GIS Database).

The proposed clearing is to re-establish old drill lines. Given the previous disturbance and considering that the proposed clearing will occur across several narrow drill lines, it is unlikely that the removal of 1 hectare of native vegetation will cause or exacerbate the incidence or intensity of flooding.

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

**Methodology** GIS Database:  
- Hydrography, linear

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

##### Comments

There is one Native Title Claim (WC00/7) over the areas 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*.

According to available databases there are no registered Aboriginal Sites of Significance within the application areas (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 by the Department of Mines and Petroleum on 13 June 2011, inviting submissions from the public. No submissions were received.

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

#### 4. References

- Botanica Consulting (2010) Kagara Drill Line: Level 1 Flora and Vegetation Survey: Tenements M77/545 and M77/467. Unpublished report. Botanica Consulting, Western Australia.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DEC (2011) Re: Impact to Priority 4 listed *Microcorys* sp. *Forrestania* (V. English 2004) (Advice to Kagara Nickel). Department of Environment and Conservation, 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.
- EPA (2009) Advice on Conservation Values and Review of Nature Proposals in the Lake Cronin Region. Advice of the Environmental Protection Authority to the Minister for Environment under Section 16(e) of the Environmental Protection Act 1986. Report 1329. Environmental Protection Authority, Western Australia.
- Gibson, N. (2004) Flora and vegetation of the Eastern Goldfields Ranges: Part 7. Middle and South Ironcap, Digger Rock and Hatter Hill. *Journal of the Royal Society of Western Australia*, 87:49-62, 2004.
- Kagara Nickel (2011) Clearing Permit Application Supporting Documentation. Kagara Nickel 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.
- 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.

#### 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.