Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3119/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Hamersley Iron Pty Ltd**

1.3. Property details

Property: *Iron Ore* (*Hamersley Range*) *Agreement Act 1963*, Mineral Lease 4SA (AML 70/4)
Local Government Area: Shire of Ashburton
Colloquial name: Tom Price Infrastructure Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2		Mechanical Removal	Constructing a tyre storage and maintenance facility

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 scale of 1:250,000 for the whole of Western Australia. One Beard Vegetation Association is located within the application area (Shepherd et al, 2001):

Beard Vegetation Association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.

Biota Environmental Sciences (Biota) conducted a vegetation assessment of the proposed clearing area in September 2008. Approximately 66% (1.7 hectares) of the application area comprised ground that had been historically cleared for access tracks and laydown areas (Biota, 2008). Biota (2008) identified three vegetation types within the application area:

1. ***Corymbia hamersleyana*, *Acacia pruinocarpa* low open woodland over *A. maitlandii*, *Stylobasium spathulatum* open shrubland over *Triodia wiseana* open hummock grassland.**

   This vegetation type occurred on the stony plain in the centre of the study area, occupying 0.5 hectares. Other associated species included *Acacia spondylophylla*, *Cymbopogon ambiguus*, *Enneapogon lindleyanus*, *Gossypium robinsonii*, *Jasminum didymium* subsp. *lineare*, *Ptilotus obovatus* var. *obovatus*, *Salsola tragus* and *Tephrosia rosea*.

2. ***Eucalyptus socialis* subsp. *eucentrica* (*E. leucophloia* subsp. *leucophloia*) low woodland over *Acacia bivenosa* tall shrubland over *Triodia wiseana* hummock**

Clearing Description

Hamersley Iron (2009) proposes to clear up to 2 hectares of native vegetation within a larger area totalling approximately 2.5 hectares. The proposed clearing is located approximately 7 kilometres south of Tom Price (GIS Database).

The purpose of the proposed clearing is for the construction of a tyre storage and maintenance facility (Hamersley Iron, 2009). Vegetation will be cleared by bulldozer and vegetation and topsoil will be stockpiled for rehabilitation purposes (Hamersley Iron, 2009).

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994);

to

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

Comment

The vegetation condition in the proposed clearing area ranged from poor to excellent outside of the historically disturbed areas (Biota, 2008). Vegetation on the stony plain (vegetation unit 1) was generally in poor condition due to disturbance and the presence of several aggressive weed species including *Cenchrus ciliaris* and *Acetosa vesicaria* (Biota, 2008). Vegetation in the small valley to the east of the stony plain (vegetation unit 2) was in excellent condition and the vegetation along the edge of the rocky knoll (vegetation unit 3) was in good condition (Biota, 2008).

grassland.

This vegetation occurred in a small valley on the eastern edge of the study area, occupying 0.26 hectares. Other associated species included *Acacia maitlandii*, *A. synchronicia*, *Capparis umbonarta*, *Duperreya commixta*, *Enchylaena tomentose* var. *tomentose*, *Gossypium robinsonii*, *Indigofera monophylla* and *Stylobasium spathulatum*.

3. ***Ficus brachypoda, Brachychiton acuminatus* tall open shrubland over *Eremophila fraseri* open shrubland over *Maireana georgei* scattered low shrubs over *Triodia wiseana* open hummock grassland.**

A very small area (0.09 hectares) of this vegetation type occurred on the edge of a rocky knoll in the application area. Other associated species recorded from this vegetation type included *Acacia pruinocarpa*, *Corchorus crozophorifolius*, *Gossypium robinsonii* and *Hakea lorea* subsp. *lorea*.

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 Hamersley subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Hamersley subregion generally contains mulga low woodland over bunch grasses on fine textured soils in valley floors, and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002).

A flora and vegetation survey of the application area has been conducted by Biota Environmental Sciences in September 2008. Biota (2008) recorded a total of 82 native flora species representing 46 genera from 31 families. The most common families were *Mimosaceae*, *Poaceae*, *Malvaceae*, *Chenopodiaceae* and *Caesalpiniaceae*, which is considered fairly typical of the Pilbara bioregion (Biota, 2008).

Biota (2008) identified six weed species within the application area: Ruby Dock (*Acetosa vesicaria*), Buffel Grass (*Cenchrus ciliaris*), Spiked Malvastrum (*Malvastrum americanum*), Common Sowthistle (*Sonchus oleraceus*), Black Berry Nightshade (*Solanum nigrum*) and Mimosa Bush (*Vachellia farnesiana*). The presence of introduced weed species lowers the biodiversity value of the proposed clearing area. Care must be taken to ensure that the proposed clearing activities do not spread or introduce weed species to non-infested areas. Should a clearing permit be granted, it is recommended that a condition be imposed for the purposes of weed management.

The assessing officer has conducted a search of Department of Environment and Conservation (DEC) databases for fauna that may potentially occur within a 40 kilometre radius of the application area. The search identified up to 169 animal species that could potentially occur within the survey area (DEC, 2009a). The search indicated that the area is likely to be most diverse in reptile species which would be considered fairly typical of the Pilbara region (DEC, 2009a).

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

Methodology

Biota (2008)
CALM (2002)
DEC (2009a)
GIS Database
- Interim Biogeographic Regionalisation of Australia

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

Comments

Proposal is not likely to be at variance to this Principle

Biota (2008) conducted a flora and vegetation survey of the application area in September 2008. The survey included a fauna habitat assessment of the area proposed to clear and Biota (2008) identified the following habitat types within the application area:

1. **Stony Undulating Plains**
   Eucalypt low woodland over tall open shrubland to open shrubland of mixed *Acacia* ssp. over *Triodia wiseana* hummock grassland;

2. **Rocky Crests and Slopes**
   Eucalypt low woodland over *Acacia bivenosa* tall shrubland over *Triodia wiseana* hummock grassland.

The assessing officer has conducted a search of Department of Environment and Conservation (DEC) databases for fauna of conservation significance that may occur within a 40 kilometre radius of the application area. In addition, Biota (2008) has conducted a desktop search using various databases, for fauna of conservation significance that could potentially occur within the application area and surrounding region. From the results of these searches the following fauna species of conservation significance are most likely to occur within the search area based on habitat and known range (Biota, 2008; DEC, 2009a):

- Australian Bustard (*Ardeotis australis*) – Priority 4 on the DEC Threatened and Priority Fauna list;
- Northern Quoll (*Dasyurus hallucatus*) - Schedule 1 (Fauna that is rare or likely to become extinct), *Wildlife Conservation* (*Specially Protected Fauna*) *Notice 2008* and Vulnerable, *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*;
- Pilbara Olive Python (*Liasis olivaceus barroni*) - Schedule 1 (Fauna that is rare or likely to become extinct), *Wildlife Conservation* (*Specially Protected Fauna*) *Notice 2008* and Vulnerable, *EPBC Act 1999*;
- A skink (*Notoscincus butleri*) – Priority 4 on the DEC Threatened and Priority fauna list;
- Western Pebble-mound Mouse (*Pseudomys chapmani*) – Priority 4 on the DEC Threatened and Priority Fauna list;
- Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 on the DEC Threatened and Priority Fauna list.

The habitat types found within the application area are likely to provide suitable habitat for fauna species indigenous to Western Australia, including those conservation significant species described above. However, Biota (2008), report that the vegetation communities and landform features found within the application area appear to be common and widespread throughout the Pilbara region.

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

Methodology Biota (2008)
DEC (2009a)

(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**
Biota (2008) conducted a flora and vegetation survey over the application area in September 2008. The survey included a desktop survey of the area in addition to a field survey (Biota, 2008). The desktop survey revealed that up to one Declared Rare Flora (DRF) species and numerous Priority flora species could potentially occur within the Tom Price vicinity (Biota, 2008). However, based on habitat preferences, only the following DRF and Priority flora species were considered likely to occur within the Tom Price vicinity:

- *Lepidium catapycnon* (DRF); and
- *Rostellularia adscendens* var. *latifolia* (Priority 3).

Lepidium catapycnon is often found on stony plains and hills (Biota, 2008). This habitat type is present throughout the Tom Price Mine area and this species has been recorded from several locations around Tom Price (Biota, 2008). This species was not recorded during the flora and vegetation survey of the application area (Biota, 2008).

Rostellularia adscendens var. *latifolia* is generally found in ironstone soils, near creeks and rocky hills (DEC, 2009b). Biota (2008) report that there are very scattered records of this species from near Tom Price. This species was not recorded during the flora and vegetation survey of the application area and Biota (2008) report that this species is unlikely to occur within the proposed clearing area.

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

Methodology Biota (2008)
DEC (2009b)

(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 area applied to clear (GIS

Database). The closest known TEC is located approximately 45 kilometres east of the application area (GIS Database).

Biota (2008) reports that no TECs were identified during the flora and vegetation survey of the application area.

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

Methodology Biota (2008)
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 falls within the Pilbara Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). Shepherd et al. (2001) report that approximately 99.9% of the pre-European vegetation still exists in this bioregion (see table below). The vegetation within the application area is recorded as the following Beard Vegetation Association (Shepherd et al., 2001):

- **Beard Vegetation Association 82:** Hummock grasslands, low tree steppe; Snappy Gum over *Triodia wiseana.*

According to Shepherd et al. approximately 100% of this vegetation association remains within the bioregion. In addition, the vegetation association is well represented within conservation estate (see table below).

Therefore, the vegetation within the application area is not 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	17,804,164	17,794,651	~99.9	Least Concern	6.3
Beard veg assoc. – State					
82	2,565,930	2,565,930	~100	Least Concern	10.2
Beard veg assoc. – Bioregion					
82	2,563,610	2,563,610	~100	Least Concern	10.2

* Shepherd et al. (2001) updated 2005
** 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 et al. (2001)
GIS Database
- Interim Biogeographic Regionalisation of Australia

(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 vegetation units described by Biota (2008) do not appear to be associated with any watercourses or drainage lines, however, according to available databases there is a minor ephemeral drainage line within the application area (GIS Database). Based on the climate of the region this drainage line is expected to be dry except following significant rain events which are typically associated with tropical cyclones.

Based on the above, the proposed clearing is at variance to this Principle. However, the vegetation units within the application area are well represented locally and within the Pilbara region generally. Consequently, the proposed clearing is unlikely to have a significant impact at a regional scale given the widespread distribution of the vegetation units.

Methodology Biota (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

The application area has been mapped as occurring within the Platform land system (GIS Database).

The Platform land system consists of dissected slopes and raised plains supporting hard spinifex grasslands (Van Vreeswyk et al., 2004). Van Vreeswyk et al. (2004) reports that this system is not susceptible to erosion and that approximately 97% of the vegetation within this system is in very good 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
- Rangelands 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 not likely to be at variance to this Principle

The proposed clearing is not located within any conservation areas (GIS Database). The nearest Department of Environment and Conservation managed land is the Karijini National Park, located approximately 10 kilometres east 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
- CALM Managed Land and Waters

(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 located in an arid region with an average annual rainfall of approximately 413.3 millimetres falling mainly during the summer months (BoM, 2009). Based on an average annual evaporation rate of approximately 2,500 millimetres, any surface water resulting from rain events is expected to be relatively short-lived (ANRA, 2007).

The application area has a minor, ephemeral drainage line crossing through it (GIS Database). Based on the climate of the region this creek is expected to be dry except following significant rain events which are typically associated with tropical cyclones. Therefore the proposed clearing is unlikely to have a significant impact upon surface water quality in the area.

The proposed clearing is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The Pilbara region consists of granite-greenstone bedrock in the north, and the sedimentary and volcanic rocks of the Hamersley basin in the south (DoF, 2009). The application area is located within the south of the Pilbara region and would therefore, most likely be located in the Hamersley basin. In this basin large amounts of groundwater are used for mining related purposes, principally from calcrete and pisolite valley fill aquifers (DoF, 2009). Groundwater is generally fresh or brackish (DoF, 2009). The clearing of 2 hectares, is not likely to have a significant impact upon surface or groundwater quality, or groundwater quantity.

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

Methodology

ANRA (2007)
BoM (2009)
DoF (2009)
GIS Database
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)

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

Comments

Proposal is not likely to be at variance to this Principle

The application area is located in an arid region where the average annual evaporation rate greatly exceeds the average annual rainfall (BoM, 2009). There are no permanent watercourses within the application area, however, an ephemeral drainage line dissects the proposed clearing areas (GIS Database). This drainages line is expected to be dry for most of the year, and would likely only flow immediately following significant rainfall.

Natural flood events do occur in the Pilbara region following cyclonic activity. However, the proposed clearing is not expected to increase the incidence or intensity of such events given the size of the area to be cleared (2

hectares), in relation to the Ashburton River catchment area (7,877,700 hectares) (GIS Database).

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

Methodology BoM (2009)
GIS Database
- Hydrographic Catchments - Catchments
- Hydrography, linear

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

Comments

There is one Native Title claim (WC97/089) 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 tenement has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

According to available databases there are no known 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.

There were no submissions received during the public comments period.

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

4. Assessor's comments

Comment

The proposal has been assessed against the Clearing Principles, and 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 for the purposes of weed management, rehabilitation, record keeping and permit reporting.

5. References

ANRA (2007) Rangelands overview: Pilbara [online]. Available from: http://www.anra.gov.au/tropics/rangelands/overview/wa/ibra-pil.html. Accessed 23 April, 2009.

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BoM (2009) Climate Statistics for Australia Locations - Statistics for Newman. Bureau of Meteorology. Available online from: www.bom.wa.gov.au. Accessed 23 April 2009.

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DEC (2009a) NatureMap. Department of Environment and Conservation. Available online from: http://naturemap.dec.wa.gov.au. Accessed 23 April 2009.

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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., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2005).

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6. Glossary

Acronyms:

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

Definitions:

{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.