Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4360/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **BHP Billiton Iron Ore Pty Ltd**

1.3. Property details

Property: *Iron Ore (Mount Newman) Agreement Act 1964*, Mineral Lease 244SA (AML 70/244)
Local Government Authority: Shire of East Pilbara
Colloquial name: Orebody 25 Gatehouse Construction

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 23 June 2011

2. Background

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. Two Beard vegetation associations are located within the application area (GIS Database; Shepherd, 2009):

18: Low woodland; mulga (*Acacia aneura*) and;
82: Hummock grasslands, low tree steppe: Snappy Gum over *Triodia wiseana*.

A flora survey of the orebody 25 gatehouse application area was conducted by BHP Billiton Iron Ore (2011) on 5 January 2011. BHP Billiton Iron Ore (2011) identified three vegetation communities within the application area:

VA1 - *Corymbia candida*, *Acacia* spp., *Grevillea striata* low (open) woodland over *Acacia* spp. (open) shrubland over *Cenchrus ciliaris* tussock grassland and *Triodia* spp. Open hummock grassland on stony plains;
VA2 - *Corymbia hamersleyana*, *Acacia aneura* var. *pilbarana* low open woodland over *Acacia* spp. (open) shrubland over *Triodia* spp. open hummock grassland and *Cenchrus ciliaris* very open tussock grassland on lower slopes; and
VA3 - *Acacia* spp., *Vachellia farnesiana* shrubland to open scrub over mixed species low open shrubland over *Cenchrus ciliaris*, *Themeda triandra*, *Eulalia aurea* tussock grassland in shallow drainage.

Clearing Description
BHP Billiton Iron Ore is proposing to clear up to 11.5 hectares of native vegetation for the construction of a gatehouse and associated infrastructure (BHP Billiton Iron Ore, 2011).

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

To:

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

Comment
The application area is located approximately three kilometres north-west of the Newman town site (GIS Database).

The vegetation condition was derived from a flora and vegetation survey conducted by BHP Billiton Iron Ore (2011).

3. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

The application area occurs within the Hamersley (PIL3) subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by Mulga low woodlands over bunch grasses on fine textured soils in valley floors, and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges (CALM, 2002). The vegetation within the application area consists of Beard vegetation associations 18 and 82, which are common and widespread throughout the Pilbara bioregion with approximately 100% of the pre-European vegetation extent remaining (Shepherd, 2009; GIS Database).

A flora and vegetation survey of the orebody 25 gatehouse application area was conducted by BHP Billiton Iron Ore on 5 January 2011. A total of 87 taxa were recorded in the application area, belonging to 22 families. The most frequently recorded genera were *Acacia*, *Senna* and *Corymbia* (BHP Billiton Iron Ore, 2011). The native vegetation to be cleared is in 'degraded' to 'good' condition (Keighery, 1994). No Declared Rare Flora species were recorded during the field survey however one Priority 3 flora species, *Rhagodia* sp. Hamersley, was recorded in the application area (BHP Billiton Iron Ore, 2011).

A targeted flora survey was conducted by Onshore Environmental Consultants on 6 March 2011 to confirm the presence, location and population size of the Priority 3 species *Rhagodia* sp. Hamersley identified during the field survey conducted by BHP Billiton Iron Ore (BHP Billiton Iron Ore, 2011). The entire project area was ground truthed at 30 metre intervals. No specimens of *Rhagodia* sp. Hamersley were located during the targeted survey (Onshore Environmental, 2011). Numerous specimens of the closely related *Rhagodia eremaea* (not a priority species) were located. In addition, a sterile specimen was taken during the BHP Billiton Iron Ore survey in January 2011 and submitted to the WA herbarium. It was determined that this specimen, initially identified as *Rhagodia* sp. Hamersley, would be better placed as *Rhagodia eremaea* (BHP Billiton Iron Ore, 2011). Therefore, no Priority species were recorded within the application area.

Seven weed species were identified during the 2011 BHP Billiton Iron Ore survey: Buffel grass (*Cenchrus ciliaris*), Birdwood grass (*Cenchrus setiger*), Spiked Malvastrum (*Malvastrum americanum*), Mimosa bush (*Vachellia famesiana*), Ulcardo melon (*Cucumis melo subsp. agrestis*), Flaxleaf fleabane (*Conyza bonariensis*) and Bushy starwort (*Symphyotrichum squamatum*). No Declared Plants under the *Agriculture and Related Resources Protection Act 1976* were recorded within the application area (BHP Billiton Iron Ore, 2011). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Two species of conservation significant fauna were recorded during a Level 1 fauna study conducted by ENV Australia in April 2009 which covered areas within 500 metres of the application area. These were the Rainbow Bee-eater (*Merops ornatus*) and Star Finch (*Neochmia ruficauda clarescens*). A further 14 fauna species of conservation significance may potentially occur within the application area, however, given the degraded and disturbed nature of the vegetation to be cleared it is unlikely that the application area provides significant habitat or foraging opportunities for these species (BHP Billiton Iron Ore, 2011) and it is not likely that the area to be cleared comprises a high level of biological diversity.

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

Methodology

BHP Billiton Iron Ore (2011)
CALM (2002)
ENV Australia (2009)
Onshore Environmental (2011)
Keighery (1994)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation
- 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

The vegetation within the application area consists of Beard vegetation associations 18 and 82, which are common and widespread throughout the Pilbara bioregion with approximately 100% of the pre-European vegetation extent remaining (Shepherd, 2009; GIS Database). The native vegetation to be cleared is in 'degraded' to 'good' condition (Keighery, 1994).

A Level 1 fauna survey conducted by ENV Australia (2009), which covered areas within 500 metres of the application area, recorded 88 terrestrial vertebrate fauna species, including: one amphibian species, 14 reptile species, 58 bird species and 15 mammal species. Four introduced mammal species were recorded during the

survey, including a dingo, cat, fox and rabbit (BHP Billiton Iron Ore, 2011).

Two species of conservation significant fauna were recorded during the survey conducted by ENV Australia (2009). These were the Rainbow Bee-eater (*Merops ornatus*) and Star Finch (*Neochmia ruficauda clarescens*). A further 14 fauna species of conservation significance were identified as having potential to occur within the application area. However, an assessment by ENV Australia (2009) of the likelihood of these species to actually utilise the application area found that, given the degraded and disturbed nature of the vegetation to be cleared, it is unlikely that the application area provides significant habitat or foraging opportunities for these species (BHP Billiton Iron Ore, 2011).

The application area does not contain any significant fauna habitats such as caves, rock piles or waterholes and it is therefore not likely that the vegetation to be cleared comprises a significant habitat for fauna indigenous to Western Australia (GIS Database, BHP Billiton Iron Ore, 2011).

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

Methodology
BHP Billiton Iron Ore (2011)
ENV Australia (2009)
Keighery (1994)
Shepherd (2009)
GIS Database:
- Pre-European Vegetation
- Newman 1.4m Orthomosaic - Landgate 2003

(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 records of Declared Rare Flora (DRF) within the application area (GIS Database).

A flora and vegetation survey of the orebody 25 gatehouse application area, conducted by BHP Billiton Iron Ore on 5 January 2011, did not identify any DRF within the application area.

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

Methodology
BHP Billiton Iron Ore (2011)
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
A search of the available databases shows that the application area sits within the outer edge of the buffer zone of the 'EthelG' Threatened Ecological Community (TEC) (GIS Database; BHP Billiton Iron Ore, 2011). EthelG is identified as the Ethel Gorge groundwater aquifer stygobiont community and is located 22 kilometres northeast of the application area. This TEC is a water dependent TEC and the clearing of 11.5 hectares of native vegetation is not likely to significantly impact upon water resources within the local area, and is therefore not likely to impact upon this TEC.

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

Methodology
BHP Billiton Iron Ore (2011)
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 IBRA bioregion (GIS Database). Shepherd (2009) reports that approximately 99.89% of the pre-European vegetation within this bioregion still exists.

Two Beard vegetation associations are located within the application area (GIS Database; Shepherd, 2009):

18: Low woodland; mulga (*Acacia aneura*) and;
82: Hummock grasslands, low tree steppe: Snappy Gum over *Triodia wiseana*.

According to Shepherd (2009), Beard vegetation associations 18 and 82 retain approximately 100% of their

pre-European extent which is more than the 30% threshold level recommended in the National Objectives Targets for Biodiversity Conservation below which, species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Pilbara	17,804,193.01	17,785,000.82	~99.89	Least Concern	6.32
Beard vegetation associations - State					
18	19,892,304.8	19,890,275.4	~99.99	Least Concern	2.13
82	2,565,901.3	2,565,901.3	~100	Least Concern	10.24
Beard vegetation associations - Bioregion					
18	676,556.7	676,556.7	~100	Least Concern	16.80
82	2,563,583.2	2,563,583.2	~100	Least Concern	10.25

* Shepherd (2009)
** Department of Natural Resources and Environment (2002)

Given that the vegetation is well represented locally and regionally the vegetation within the proposed area is not likely to be significant as a remnant in a highly cleared landscape.

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

Methodology Department of Natural Resources and Environment (2002)
EPA (2000)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

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

Comments **Proposal is not at variance to this Principle**
There are no permanent watercourses or ephemeral drainage lines mapped within the area under application (GIS Database, BHP Billiton Iron Ore, 2011). A survey conducted by BHP Billiton Iron Ore (2011) did not identify any vegetation growing in association with a watercourse or wetland.

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

Methodology BHP Billiton Iron Ore (2011)
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 comprises of the Newman and Elimunna land systems (GIS Database).

The Newman land system is comprised of rugged jaspilite, ridges and mountains supporting hard spinifex grasslands. It is generally not susceptible to soil erosion (Van Vreeswyk et al., 2004). The Elimunna land system is comprised of stony plains on basalt supporting sparse acacia and cassia shrublands and patchy tussock grasslands. Some drainage floors are slightly susceptible to erosion but most of the system is inherently resistant (Van Vreeswyk et al., 2004).

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

Methodology Van Vreeswyk et al. (2004)
GIS Database:
- Rangeland Land System Mapping

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments

Proposal is not likely to be at variance to this Principle

The proposed application area is not located within any conservation areas (GIS Database). The nearest conservation area is Karijini National Park, located approximately 120 kilometres north-west of the application area (GIS Database).

Given the distance of the application area from Karijini National Park, the proposed clearing is not likely to have a negative impact on the environmental values of this conservation area.

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

Methodology

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 proposed clearing area is located entirely within the Newman Water Reserve, a Public Drinking Water Source Area (PDWSA) gazetted under the *Country Areas Water Supply Act 1947* on 21 August 1983. This PDWSA is defined a 'Priority 1 (P1)' under the Water Source Protection Classification System. The application area is also located within the proclaimed Pilbara groundwater area under the *Rights in Water and Irrigation Act 1994* (GIS Database), however, advice received from the Department of Water (DoW) identifies that DoW is satisfied that the proposed clearing of 11.5 hectares is unlikely to have a significant impact on the quality or quantity of groundwater (Department of Water, 2011).

There are no permanent watercourses or ephemeral drainage lines mapped within the area under application (GIS Database, BHP Billiton Iron Ore, 2011). Any surface water within the application area is only likely to remain for short periods following significant rainfall events as the annual evaporation rate greatly exceeds rainfall (BoM, 2011). 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

BHP Billiton Iron Ore (2011)
BoM (2011)
Department of Water (2011)
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 experiences an arid (semi-desert) tropical climate with summer cyclonic rains or thunderstorm events, with an annual average rainfall of approximately 314.2 millimetres per year (CALM, 2002; BoM, 2011). Based on an average annual evaporation rate of 3,200 - 3,600 millimetres (BoM, 2011), any surface water resulting from rainfall events is likely to be relatively short lived.

Given the size of the area to be cleared (11.5 hectares) compared to the size of the Fortescue River catchment area (2,975,192 hectares) (GIS Database) it is not likely that the proposed clearing will lead to an appreciable increase in run off, and subsequently 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

BoM (2011)
CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, Linear

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

Comments

There is one Native Title Claim (WC05/6) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment and Conservation and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 23 May 2011 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT

4. References

BHP Billiton Iron Ore (2011) Orebody 25 Gatehouse Construction NVCP Application. Application for a Native Vegetation Clearing Permit under the *Environmental Protection Act 1986*

BoM (2011) Climate Statistics for Australian Locations. A Search for Climate Statistics for Newman Aero, Australian Government Bureau of Meteorology, viewed 15 June 2011, <http://reg.bom.gov.au/climate/averages/tables/cw_007176.shtml>.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 3 (PIL3 - Hamersley subregion) 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.

Department of Water (2011) Advice provided to the Department of Mines and Petroleum for Clearing Permit Application CPS 4360/1 dated 30 May 2011.

ENV Australia (2009) Newman to Jimblebar transmission line and Newman town substation Terrestrial Fauna Survey. Internal document prepared for BHP Billiton Iron Ore.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Onshore Environmental (2011) *Targeted Survey for Rhagodia sp. Hamersley (Priority 3) OB25 Gatehouse Study Area*. Internal document prepared for BHPBIO.

Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A & Hennig, P. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), 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 (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia

EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
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 Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	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.