



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4797/1  
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)  
General Purpose Lease 52/257  
General Purpose Lease 52/258  
General Purpose Lease 52/260  
Local Government Area: Shire of East Pilbara  
Colloquial name: Orebody 35 Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
392		Mechanical Removal	Mineral production and associated activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 1 March 2012

## 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 for the whole of Western Australia. Two Beard vegetation associations have been mapped within the application area (GIS Database; Shepherd, 2009).

18: Low woodland; mulga (*Acacia aneura*); and  
82: Hummock grassland, low tree steppe; snappy gum over *Triodia wiseana*.

A flora and vegetation survey conducted by GHD (2011) in May and August 2010 identified the following seven, broad vegetation communities within the application area:

- *Acacia* Low Open Forest to Low Woodland;
- *Acacia* Low Open Woodland to Low Woodland;
- *Acacia* Low Woodland;
- *Acacia* Open Shrubland;
- *Eucalyptus* Low Woodland;
- *Themeda* Open Tussock Grassland; and
- *Triodia* Hummock Grassland.

**Clearing Description** BHP Billiton Iron Ore Pty Ltd is proposing to clear up to 392 hectares of native vegetation within a broader boundary of approximately 450 hectares for the purpose of mineral production. Mineral production activities to be undertaken within the area include development of mine pits, stockpiles, haul roads and access tracks.

Vegetation and topsoil will be cleared and stockpiled and progressive rehabilitation of cleared areas will be conducted where practicable.

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

**Comment** The application area is located within the Pilbara region of Western Australia and is located approximately 7 kilometres south west of Newman.



### 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 proposed clearing is located approximately 7 kilometres south west of Newman in the Hamersley subregion of the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation can be described as 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). Rare features of the subregion include gorges of the Hamersley Ranges (particularly those within Karijini National Park), Palm Spring, Duck Creek and Themeda grasslands (CALM, 2002). Permanent spring systems such as Weeli Wolli are also listed for their importance as refugia (CALM, 2002).

A flora and vegetation survey of the application area and the surrounding areas was conducted by GHD (2011) in May and August 2010. This survey identified 347 flora taxa from 149 genera and 48 families. The application area is not considered to have greater floral diversity than the surrounding areas (BHP Billiton, 2011).

According to available databases there are no Declared Rare Flora (DRF) or Priority Flora species within the application area (GIS Database). A flora and vegetation survey conducted by GHD (2011) in May and August 2010, did not identify any DRF or Priority Flora species.

A flora and vegetation survey conducted by GHD (2011) identified eight weed species, *Acetosa vesicaria*, *Argemone ochroleuca*, *Bidens bipinnata*, *Cenchrus ciliaris*, *Malvastrum americanum*, *Sisymbrium orientale*, *Sonchus oleraceus* and *Vachellia farnesiana*, within and adjacent to the application area. Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This can in turn lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. None of these species are listed as 'Declared Plant' species under the *Agriculture and Related Resources Protection Act 1976* by the Department of Agriculture and Food. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

According to available databases there are no Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) within the application area (GIS Database).

A fauna survey of the application area and surrounding areas was conducted by Biologic (2011) in March and July 2010. This survey identified 244 fauna species comprised of 36 mammal (including eight introduced species), 115 bird, 70 reptile and three amphibian species (Biologic, 2011). The habitat present within the application area is common locally and the proposed clearing is unlikely to have an adverse impact on vertebrate fauna assemblages (Biologic, 2011)

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

**Methodology**      BHP Billiton (2011)  
Biologic (2011)  
CALM (2002)  
GHD (2011)  
GIS Database:  
- IBRA WA (regions – subregions)  
- Threatened and Priority Flora  
- 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**

A fauna survey of the application area and the areas surrounding the application area conducted by Biologic (2011) identified twelve conservation significant fauna species. Of these, the following four were recorded within the application area (BHP Billiton, 2011):

Ghost Bat (*Macroderma gigas*) Priority 4 – the preferred habitat for this species is caves and permanent water sources. There were four caves within the application area, three of which are proposed to be cleared. These caves are considered to be infrequently visited and rarely used. A day roost cave, which is considered to be of greater significance, was located approximately 570 metres from the application area. It is therefore considered unlikely that the proposed clearing will impact on the conservation of this species;

Western Pebble-mound Mouse (*Pseudomys chapmani*) Priority 4 – the preferred habitat for this species is lower slopes of ridges and low rocky hills. The characteristic mounds of this species were recorded commonly throughout the broader Biologic (2011) survey area and three mounds were recorded within the application area. BHP Billiton (2011) has committed to avoiding these mounds where possible, however it is considered unlikely that the proposed clearing will impact on the conservation of this species;

Peregrine Falcon (*Falco peregrinus*) Schedule 4 – the preferred habitat for this species is along cliffs above rivers, ranges and wooded watercourses and lakes. This preferred habitat does not occur within the application



area and large foraging areas are present outside of the application area. It is therefore considered unlikely that the proposed clearing will impact on the conservation of this species; and

Australian Bustard (*Ardeotis australis*) Priority 4 – this species occurs in a variety of grassland, grassy woodland and shrubland habitats. This species is nomadic and is not dependent on the habitat within the application area. It is therefore considered unlikely that the proposed clearing will impact on the conservation of this species.

A further four conservation significant fauna species are considered likely to occur within the application area (BHP Billiton, 2011):

Pilbara Olive Python (*Liasis olivaceus barroni*) Vulnerable – the preferred habitat for this species includes cliffs, permanent water sources or gullies. Some gorge habitat is present within the application area, however there is a large area of available habitat outside of the application area and this species is considered common and widespread across the Hamersley subregion. It is therefore considered unlikely that the proposed clearing will impact on the conservation of this species;

Bush Stone-curlew (*Burhinus grallarius*) Priority 4 – this species is considered widespread through northern and north eastern Australia, and throughout the region. It is considered unlikely that the proposed clearing will impact on the conservation of this species;

Rainbow Bee-eater (*Merops ornatus*) Migratory – this species has the potential to occur within all habitats within the application area. It is common and widespread in the region and suitable habitat is abundant outside of the application area; and

Blind Snake (*Ramphotyphlops ganei*) Priority 1 – this species is known to occur within gorge habitats and is endemic to the Pilbara. While there is potential habitat within the application area, this species is widespread and suitable habitat will remain in areas surrounding the application area. It is therefore considered unlikely that the proposed clearing will impact on the conservation of this species.

While it is likely that the proposed clearing will impact on habitat suitable for conservation significant species, these habitat types are common locally and regionally. Additionally, despite surveys, no significant populations of any conservation significant fauna species have been recorded within the application area. It is therefore considered unlikely that the proposed clearing will impact on significant habitat for fauna indigenous to Western Australia.

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

**Methodology** BHP Billiton (2011)  
Biologic (2011)

**(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

There are no known records of Declared Rare Flora (DRF) within the application area (GIS Database). A flora and vegetation survey of the application area conducted by GHD (2011) identified potential habitat for the DRF species *Lepidium catapycnon*, however no *Lepidium catapycnon* were recorded within the application area (GHD, 2011).

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

**Methodology** GHD (2011)  
GIS Database:  
- Threatened and Priority Flora

**(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 records of Threatened Ecological Communities (TEC's) within the application area (GIS Database). The nearest known TEC is approximately 8 kilometres east of the application area at its closest point (GIS Database). At this distance there is little likelihood of any impacts to the TEC as a result of the proposed clearing.

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

**Methodology** 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 is located within the Pilbara Interim Biogeographical Regionalisation for Australia (IBRA) bioregion (GIS Database). Shepherd (2009) reports that approximately 99.89% of the pre-European vegetation remains in the Pilbara bioregion.

The vegetation within the application area has been broadly mapped as Beard vegetation associations:

18: Low woodland; mulga (*Acacia aneura*); and  
82: Hummock grassland, low tree steppe; snappy gum over *Triodia wiseana*.

According to Shepherd (2009) approximately 100% of Beard vegetation associations 18 and 82 remain within the Pilbara bioregion (see table below).

	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	~99.89	Least Concern	~6.32
Beard vegetation associations - State					
18	19,892,305	19,890,275	~99.99	Least Concern	~2.13
82	2,565,901	2,565,901	~100	Least Concern	~10.24
Beard vegetation associations - Bioregion					
18	676,557	676,557	~100	Least Concern	~16.80
82	2,563,583	2,563,583	~100	Least Concern	~10.25

\* Shepherd (2009)

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

The vegetation within the application area is not considered to be a remnant of native vegetation in an area that has been extensively cleared.

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 – 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 at variance to this Principle**

There are no permanent wetlands or watercourses within the application area, however there are several non-perennial watercourses (GIS Database). A flora and vegetation survey of the application area was conducted by GHD (2011) and identified two vegetation communities associated with non-perennial watercourses within the application area:

1B: *Acacia* Low Open Forest to Low Woodland; and  
3A: *Acacia* Low Open Woodland to Low Woodland.

The total area surveyed by GHD (2011) was approximately 6,100 hectares. Of this, GHD conducted a higher intensity survey within a 510 hectare proposal area, which includes the 450 hectare application area. GHD (2011) defined approximately 74.7 hectares of community 1B within the broader survey area of which approximately 43 hectares is within the application area. While approximately 449.3 hectares of community 3A was recorded within the broader survey area with approximately 67 hectares being within the proposal area (GHD, 2011).

While the proposed clearing is likely to impact on vegetation growing in association with ephemeral watercourses, flora surveys have shown that these communities are present in the areas surrounding the



application area. It is therefore considered unlikely that the proposed clearing will significantly impact upon the conservation of these vegetation communities.

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

**Methodology** GHD (2011)  
GIS Databases:  
- Hydrography, linear

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

**Comments** Proposal may be at variance to this Principle

The application area intersects the following three land systems (GIS Database):

The Boolgeeda land system is characterised by stony lower slopes and plains below hill systems supporting hard and soft Spinifex grasslands and mulga shrublands (Van Vreeswyk et al., 2004). This vegetation is generally not prone to degradation and the system is not susceptible to erosion (Van Vreeswyk et al., 2004).

The Elimunna land system is characterised by stony plains on basalt supporting sparse acacia and cassia shrublands and patchy tussock grasslands (Van Vreeswyk et al., 2004). Some drainage floors are slightly susceptible to erosion but most of the system is inherently resistant (Van Vreeswyk et al., 2004).

The Newman land system is characterised by rugged jaspilite plateaux, ridges and mountains supporting hard Spinifex grasslands (Van Vreeswyk et al., 2004). This land system is not susceptible to erosion (Van Vreeswyk et al., 2004).

While none of the land systems are highly susceptible to erosion, the large size of the proposed clearing (392 hectares) increases the potential for land degradation issues. Potential land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

Based on the above, the proposed clearing may 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 application area is not located within a conservation reserve (GIS Database). The nearest conservation reserve is Karijini National Park, located approximately 110 kilometres west of the application area (GIS Database). At this distance it is considered unlikely that the proposed clearing will impact on the environmental values of any 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

According to available databases the application area is located within the Newman Water Reserve (GIS Database). Advice from the Department of Water (DoW) (2012) noted that BHP Billiton is the water service provider for this water source and that for the benefit of the community, planning decisions on proposed land uses in the reserve need to be carefully considered. It was also noted by DoW (2012) that the Newman Water Reserve is listed as Priority 3 which is compatible with mineral production activities.

The groundwater salinity within the application area is approximately 500 - 1,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). It is considered unlikely that the proposed clearing of 392 hectares of native vegetation within the Hamersley Groundwater Province (10,166,832 hectares) (GIS Database) will cause salinity levels within the application area to alter significantly.

There are no permanent water bodies within the application area (GIS Database). The application area experiences a semi-desert tropical climate with an average annual rainfall of approximately 322 millimetres recorded at Newman Aero weather station (BoM, 2012; CALM, 2002). The average annual evaporation rate within the application area is approximately 3,400 – 3,600 millimetres (GIS Database). It is therefore considered unlikely that water will pool in the application area for long periods of time.



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

**Methodology** BoM (2012)  
CALM (2002)  
DoW (2012)  
GIS Database:  
- Evaporation Isopleths  
- Groundwater Provinces  
- Groundwater Salinity, Statewide  
- Hydrography, linear  
- Public Drinking Water Source Areas (PDWSA)

**(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 a semi-desert tropical climate with an average annual rainfall of approximately 322 millimetres recorded at Newman Aero weather (BoM, 2012; CALM, 2002). The majority of rainfall in this area usually falls in summer cyclonic and thunderstorm events (CALM, 2002). Large runoff as well as localised and regional flooding can occur following intense rainfall events. It is therefore considered unlikely that the proposed clearing 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** BoM (2011)  
CALM (2002)

**Planning instrument, Native Title, 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 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 three 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 16 January 2012 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

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

#### 4. References

- BHP Billiton (2011) Orebody 35 Application for Native Vegetation Clearing Permit under the *Environmental Protection Act 1986*. Unpublished report dated November 2011.
- Biologic (2011) Orebody 35 Vertebrate Fauna Impact Assessment BHP Billiton Iron Ore Pty Ltd. Unpublished report dated November 2011.
- BoM (2012) BoM Website - Climate Averages by Number, Averages for NEWMAN AERO. [www.bom.gov.au/climate/averages/tables.shtml](http://www.bom.gov.au/climate/averages/tables.shtml) (Accessed 17 February 2012).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management
- 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.
- DoW (2012) Advice Regarding Application to Clear Native Vegetation under the *Environmental Protection Act 1986*.
- GHD (2011) BHP Billiton Iron Ore Report for Ore Body 35 Flora and Vegetation Impact Assessment. Unpublished report dated October 2011.
- 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:

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.