Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4849/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Mulga Downs Iron Ore Pty Ltd**

1.3. Property details

Property: Exploration Licence 47/1315
Exploration Licence 47/1315
Local Government Area: Shire of Ashburton
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.76		Mechanical Removal	Mineral Exploration and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 29 March 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two Beard vegetation associations have been mapped within the application area: **Beard vegetation association 29:** Sparse low woodland; mulga, discontinuous in scattered groups; and **Beard vegetation association 175:** Short bunch grassland - savanna/grass plain (Pilbara) (GIS Database; Shepherd, 2009). No vegetation surveys have been undertaken over the application area at the time of this assessment due to weather conditions and the next flora survey is scheduled for April 2012; therefore vegetation communities have not been described or mapped for this area in any further detail than Beard vegetation mapping.	Mulga Downs Iron Ore Pty Ltd (2012) has applied to clear up to 0.76 hectares of native vegetation for the purpose of mineral exploration. The clearing will comprise of access tracks and drill pads. The exploration activities are located approximately 20 kilometres north-west of Wittenoom.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); To: Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	The vegetation condition was derived from observations made by MAIA Environmental Consultancy Pty Ltd (2012) and converted to the Keighery (1994) scale..

3. Assessment of application against clearing principles

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

Comments

Proposal may be at variance to this Principle

The application area occurs within the Fortescue Plain subregion of the Pilbara IBRA bioregion (GIS Database). The Fortescue Plain subregion is characterised by alluvial plains and river frontage. There are extensive salt marsh, mulga-bunch grass, and short grass communities on alluvial plains in the east. Deeply incised gorge systems in the western (lower) part of the drainage. River gum woodlands fringe the drainage lines. Northern limit of Mulga (*Acacia aneura*). An extensive calcrete aquifer (originating within a palaeo-drainage valley) feeds numerous permanent springs in the central Fortescue, supporting large permanent wetlands with extensive stands of river gum and *Melaleuca* woodlands (CALM, 2002).

The vegetation within the application area has been broadly mapped as Beard vegetation associations 29 and 175 (GIS Database) which according to Shepherd (2009), are common and widespread both locally and regionally, and remain largely uncleared.

There were no flora surveys conducted over the application area due to cyclonic activities. A flora survey is scheduled to be undertaken by MAIA Consultancy Pty Ltd (2012) in April 2012. According to available databases there are no known records of Declared Rare Flora, Threatened Ecological Communities or Priority Ecological Communities within the application areas or within a 40 kilometre radius of the application areas (DEC 2012; GIS Database). A search on the Department of Environment and Conservation Declared Rare and Priority Flora databases within a 20 kilometre radius of the application areas revealed seven Priority flora species: *Teucrium pilbaranum* (P1), *Adiantum capillus-veneris* (P2), *Dicladanthera glabra* (P2), *Gompholobium karijini* (P2), *Glycine falcata* (P3), *Olearia mucronata* (P3) and *Eremophila magnifica* subsp. *magnifica* (P4) (DEC, 2012). Potential impacts to Priority flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

A search on NatureMap (DEC, 2012) found that no weed species had been recorded within the application area or surrounding region. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Analysis of aerial imagery identified one potential broad fauna habitat type within the application area, being a marsh flood plain, primarily with samphire and mulga vegetation (GIS Database). This habitat is considered to be in 'very good' condition (GIS Database, Keighery, 1994). Aerial imagery also suggests the widespread availability of similar vegetation communities and landforms, and the application area is not considered to support a higher biological diversity than the adjoining local or regional areas (GIS Database). Given the small area proposed to be cleared (0.76 hectares), it is not likely that the proposed clearing will have any significance on biodiversity at a regional scale.

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

Methodology

CALM (2002)
DEC (2012)
Keighery (1994)
MAIA Consultancy Pty Ltd (2012)
Shepherd (2009)
GIS Database:
- Wittenoom 50cm Orthomosaic - Landgate 2004
- Pre-European Vegetation
- IBRA WA (regions - subregions)
- 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

No targeted fauna surveys were undertaken within the application areas and the fauna habitats present within the application area have not been recorded.

Analysis of aerial imagery identified one potential broad fauna habitat type within the application area, being a marsh flood plain, primarily with samphire and mulga vegetation (GIS Database). Aerial photography suggests the vegetation condition to be in 'very good' condition (Keighery, 1994; GIS Database). Erosion and grazing pressures from cattle have degraded the vegetation condition (Hancock Prospecting Pty Ltd, 2012). The habitat present within the application area is considered to be widespread within the local area (GIS Database).

There were two conservation significant fauna species listed as either a Threatened Species under the *Environment Protection and Biodiversity Conservation Act 1999* or protected under Western Australian legislation (*Wildlife Conservation Act, 1950*), that may potentially occur within a 20 kilometre radius of the application area (DEC, 2012). These were the Australian Bustard (*Ardeotis australis*) and Northern Quoll (*Dasyurus hallucatus*). The Australian Bustard is considered highly mobile and/or has a wide distribution so the clearing is unlikely to significantly impact on the species (MAIA Consultancy Pty Ltd, 2012). The samphire marsh and mulga vegetation does not provide suitable habitat for the Northern Quoll, and is not considered to be found within the application area (MAIA Consultancy Pty Ltd, 2012).

Given the small scale of proposed clearing and the low impact nature of the project, the proposed clearing of 0.76 hectares of native vegetation is not likely to impact critical feeding or breeding habitat for any conservation significant fauna species and it is not likely to comprise of 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 CALM (2002)
Hancock Prospecting Pty Ltd (2012)
MAIA Consultancy Pty Ltd (2012)
Keighery (1994)
Shepherd (2009)
GIS Database:
- Wittenoom 50cm Orthomosaic - Landgate 2004
- IBRA WA (regions - subregions)
- Threatened Fauna

(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 Threatened flora within the application area (GIS Database). A search of the Department of Environment and Conservation Declared Rare and Priority Flora databases identified no Threatened flora species as occurring within a 20 kilometre radius of the application area (DEC, 2012).

The significance of the vegetation within the application area for the continued existence of Threatened flora is difficult to quantify with the limited information provided by the applicant. MAIA Environmental Consultancy (2012) is scheduled to conduct a flora survey in April 2012. Potential impacts to Threatened flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

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

Methodology DEC (2012)
MAIA Environmental Consultancy (2012)
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

A search of the available databases shows that there are no Threatened Ecological Communities (TEC's) situated within the application area. The nearest TEC is situated 30 kilometres west 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
- 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). The vegetation within the application area is recorded as:

Beard vegetation association 29: Sparse low woodland; mulga, discontinuous in scattered groups; and

Beard vegetation association 175: Short bunch grassland - savanna/grass plain (Pilbara) (GIS Database; Shepherd, 2009).

According to Shepherd (2009), Beard vegetation associations 29 and 175 retain approximately 99.99**%** of their pre-European extent. Therefore, the area proposed to be cleared is not a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Pilbara	17,804,193	17,785,001	~99.89	Least Concern	6.32
Beard vegetation associations - State					
29	7,903,991	7,903,991	~100	Least Concern	0.29
175	526,206	524,861	~99.74	Least Concern	4.22
Beard vegetation associations - Bioregion					
29	1,133,220	1,133,220	~100	Least Concern	1.91
175	507,036	507,006	~99.99	Least Concern	4.38

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

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

Methodology Department of Natural Resources and Environment (2002)
Shepherd (2009)
GIS Database:
- IBRA WA (regions - 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**
According to available databases, part of the application area sits within the Fortescue Marsh buffer zone and Fortescue Marsh flood plain (GIS Database). The total area of clearing that may occur within the Fortescue Marsh flood plain is 0.48 hectares (Hancock Prospecting Pty Ltd, 2012). The Fortescue Marsh is an extensive, episodically inundated samphire marsh (CALM, 2002). The application area sits within an area associated with the floodplain of the Fortescue River (Hancock Prospecting Pty Ltd, 2012). Mulga communities, particularly those fringing the Fortescue River are considered to be regionally significant (CALM, 2002). Sheet flow resulting from land clearing has potential to impact on the surrounding sensitive Mulga communities within this area. Therefore there will be some disturbance to vegetation associated with watercourses and wetlands.

The condition of the riparian vegetation type is classified as 'very good' (Keighery, 1994; GIS Database). Given the small scale of proposed clearing and the low impact nature of the project, the clearing of some riparian vegetation is unlikely to result in any significant impact to vegetation growing in association with a watercourse or wetland.

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

Methodology CALM (2002)
Hancock Prospecting Pty Ltd (2012)
Keighery (1994)
GIS Database:
- Geodata, Lakes
- 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 intersects three land systems; the Boolgeeda, Jurrawarrina and Coolibah 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. Hard spinifex grasslands are not preferred by livestock but soft spinifex is moderately preferred for a few years following fire. Vegetation is generally not prone to degradation and the system is not susceptible to erosion (Van Vreeswyk et al., 2004)

The Jurrawarrina land system is characterised by hardpan plains and alluvial tracts supporting mulga shrublands with tussock and spinifex grasses. Much of the vegetation on this system is highly preferred by grazing animals and is prone to degradation if overgrazed. Some hardpan washplains, drainage tracts and groves are moderately susceptible to erosion (Van Vreeswyk et al., 2004).

The Coolibah land system is described as flood plains with weakly gilgaied clay soils supporting coolibah woodlands with tussock grass understorey. Vegetation includes perennial grasses and forbs which are preferred by grazing animals and are prone to depletion under uncontrolled grazing. Flood plains generally have low susceptibility to erosion (Van Vreeswyk et al., 2004).

The proposed clearing of 0.76 hectares for mineral exploration and associated activities is not likely to result in large areas of disturbed or open land. Given the nature and scale of the proposed activities, the clearing is not likely to result in appreciable land degradation.

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 application area is not located within any conservation area (GIS Database). The nearest conservation area is Karijini National Park, located approximately 16 kilometres south of the application area (GIS Database).

Given the distance of the application area from the Karijini National Park, the proposed clearing is not likely to provide a significant ecological linkage or fauna movement corridor and is not likely to impact the environmental values of the 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 may be at variance to this Principle**
The application area is not located within a Public Drinking Water Source Area (GIS Database). The application areas are located within the proclaimed Pilbara groundwater area under the *Rights in Water and Irrigation Act 1994* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

The vegetation of the Pilbara region has adapted to the unpredictable water flow regime, however substantial changes to surface water flows (i.e sheet flow), resulting in an increase or decrease of surface water can seriously impact on vegetation (CALM, 2002). The application area sits within an area associated with the floodplain of the Fortescue Marsh (Hancock Prospecting Pty Ltd, 2012), where Mulga (*Acacia aneura*) has roots which are adapted to taking water from thin surface soils as they have no tap roots for absorbing groundwater (MAIA Environmental Consultancy Pty Ltd, 2012). Consequently, the distribution and abundance of mulga is primarily influenced by soil moisture and patterns of surface drainage. The loss of Mulga conversely results in increased soil erosion and downstream flood levels due to the extent of moisture retention which is achieved in mulga groves (Fortescue Metals Group Limited, 2008).

However given the low impact nature of the proposed clearing activities, and the small amount of native vegetation to be cleared (0.76 hectares) the proposed clearing is not likely to cause any significant deterioration in the quality of surface or underground water.

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

Methodology CALM (2002)
Fortescue Metals Group Limited (2008)
Hancock Prospecting Pty Ltd (2012)
MAIA Environmental Consultancy Pty Ltd (2012)
GIS Database:
- Geodata, Lakes
- Groundwater Salinity, Statewide
- Hydrography, Linear

- Public Drinking Water Source Areas
- RIWI Act, Groundwater Areas

(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 within the Fortescue Marsh floodplain (GIS Database). The Fortescue River in this area is not a distinct channel, so the low impact nature of activities and small size of clearing of native vegetation by Mulga Downs Iron Ore Pty Ltd will not constitute a significant change to the natural flow regime of the river (Hancock Prospecting Pty Ltd, 2012).

The application area experiences a semi desert tropical climate (CALM, 2002), where the annual evaporation rate exceeds the annual rainfall (BoM, 2012). Any surface water resulting from normal rain events is expected to be short lived.

The clearing size of 0.76 hectares in comparison to the size of Fortescue River catchment area (1,860,784 hectares) (GIS Database) is not likely to 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 (2012)
CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, Linear

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

Comments

There are two Native Title claims over the area under application (WC03/3 and WC11/6). 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 is no registered Aboriginal Site 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 13 February 2012 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 - Determined by the Federal Court

4. References

BoM (2012) Climate Statistics for Australian Locations. A Search for Climate Statistics for Wittenoom, Australian Government Bureau of Meteorology, viewed 6 March 2012, <http://reg.bom.gov.au/climate/averages/tables/cw_005026.shtml>.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 2 (PIL2 - Fortescue Plains subregion) Department of Conservation and Land Management, Western Australia.

DEC (2012) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 6 March 2012, <http://naturemap.dec.wa.gov.au>.

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.

Fortescue Metals Group Limited (2008) Fortescue Metals Group Limited - Exploration Environmental Management Plan, Unpublished Report, 2008.

Hancock Prospecting Pty Ltd (2012) Mulga Downs Iron Ore Pty Ltd, Tenement E47/2221, Native Vegetation Clearing Permit. Unpublished Report, January 2012.

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

MAIA Environmental Consultancy Pty Ltd (2012). HPPL Mulga Downs West, E47/2221: Vegetation of the Area, Memo. Unpublished report prepared for Mulga Downs Iron Ore Pty Ltd, January 2012.

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., Hennig, P., and Leighton, K.A. (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.