



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4650/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: HR Forrestania Pty Ltd

1.3. Property details

Property: Exploration Licence 77/1354
Exploration Licence 77/1406
Prospecting Licence 77/3854
Prospecting Licence 77/3607
Prospecting Licence 77/3849
Local Government Area: Shire of Kondinin
Colloquial name:

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 0.67 | | Mechanical Removal | Mineral Exploration |

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 December 2011

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 and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area:

Beard vegetation association 1413: Mosaic: Shrublands; acacia, casuarina & melaleuca thicket (Shepherd, 2009; GIS Database).

Botanica Consulting (2011) conducted a flora survey of the application area and surrounding areas during 5 and 6 May 2011, and described six vegetation communities of the application area:

1. Mixed Mallee shrubland over *Allocasuarina* shrubland;
2. Mixed Mallee shrubland over *Melaleuca* shrubland;
3. *Eucalyptus livida* Mallee shrubland over *Allocasuarina acutivalvis* shrubland;
4. Mallee woodland;
5. Mixed Mallee heath; and
6. Regrowth *Eucalyptus* woodland over mixed shrubs.

Clearing Description HR Forrestania Pty Ltd is proposing to clear up to 0.67 hectares of native vegetation for the purpose of access tracks and drilling sites for a proposed drilling program which is required to define minerals on the tenements. The activity will include clearing drill pads (proposed to be either 20 x 20 metres or 10 x 30 meters) for RC percussion drilling. Historically cleared access tracks will be used.

The vegetation will be cleared using a front end loader. The vegetation and topsoil will be stockpiled separately for use in rehabilitation. A botanist will be present during clearing to ensure there are no impacts to DRF outside of those applied to be impacted.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

To:

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

Comment

The application area is located in the Southern Cross subregion of Western Australia and is situated approximately 77 kilometres north-east of the Hyden town site (GIS Database).

The vegetation condition was derived from a vegetation survey conducted by Botanica Consulting (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 Southern Cross (COO2) Interim Biogeographic Regionalisation of Australia (IBRA) subregion (GIS Database). This subregion is generally described as diverse Eucalyptus woodlands (*Eucalyptus salmonophloia*, *E. salubris*, *E. transcontinentalis*, *E. longicornis*) is rich in endemic eucalypts occurring around salt lakes, on the low greenstone hills, valley alluvials and broad plains of calcareous earths (CALM, 2002). The salt lake surfaces support dwarf shrublands of samphire. The granite basement outcrops at mid-levels in the landscape and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*. Upper levels in the landscape are the eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways. Mallees (*Eucalyptus leptopoda*, *E. platycorys* and *E. scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata*, *Callitris preissii*, *Melaleuca uncinata* and *Acacia beauverdiana*) occur on these uplands, as well as on sand lunettes associated with the broad valley floors, and sand sheets around the granite outcrops. The scrubs are rich in endemic acacias and Myrtaceae (CALM, 2002).

The vegetation within the application area is broadly mapped as Beard vegetation association 1413, which has approximately 98% of its pre-European vegetation extent remaining in the bioregion (Shepherd, 2009; GIS Database). A flora and vegetation survey of the application area was undertaken by Botanica Consulting (2011) during 5 and 6 May 2011. A total of 112 vascular plant taxa from 52 genera belonging to 25 families were recorded within the study area and the surrounding locality (Botanica Consulting, 2011). These floristics are typical of the Southern Cross subregion (Botanica Consulting, 2011).

There is a large population of the Declared Rare Flora (DRF) *Banksia sphaerocarpa* var. *dolichostyla* within and surrounding the application area (Botanica Consulting, 2011). There are also records of six species of Priority Flora within the application area; *Grevillea pilosa* subsp. *redacta* (P3), *Stylidium sejunctum* (P2), *Eutaxia acanthoclada* (P3), *Microcorys* sp. *Forrestiana* (V. English, 2004) (P4), *Eutaxia lasiocalyx* (P2) and *Baeckea* sp. *Blue Haze Mine* (P1) (Botanica Consulting, 2011; DEC, 2011). The presence of these Threatened and Priority listed species increases the diversity values of the vegetation within the local area. All of these conservation significant flora species are known from numerous locations outside of the application area. Given the low impact nature of the proposed clearing, it is unlikely that the proposed clearing will impact on the conservation status of any of the Priority Flora species or the DRF species.

No Threatened Ecological Communities or Priority Ecological Communities were recorded during the botanical survey or have previously been recorded within the application area (Botanica Consulting, 2011; GIS Database). No introduced flora species were recorded from the application area (Botanica Consulting, 2011). The potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Based on aerial imagery and the flora survey by Botanica Consulting (2011), the landforms and vegetation types identified within the application area are considered to be common and widespread within the subregion, and faunal assemblages are unlikely to be different to that found in similar habitat located elsewhere in the region (GIS Database). There were no habitat types of high ecological significance and the surrounding area is largely uncleared. Given the small area proposed to be cleared (0.67 hectares), it is not likely that the proposed clearing will have any significant impact on biodiversity at a regional scale.

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

Methodology

Botanica Consulting (2011)
CALM (2002)
Keighery (1994)
Shepherd (2009)
GIS Database:
- IBRA WA (Regions - Subregions)
- Pre-European vegetation
- Threatened Ecological Sites Buffered
- Holland 50cm Orthomosaic - Landgate 2004

(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. The vegetation types of the application areas have been inferred from aerial photography and a flora survey, and broad fauna habitat types may be inferred from these.

The major vegetation types can be described as:

1. Mixed Mallee shrubland over *Allocasuarina* shrubland;
2. Mixed Mallee shrubland over *Melaleuca* shrubland;
3. *Eucalyptus livida* Mallee shrubland over *Allocasuarina acutivalvis* shrubland;
4. Mallee woodland;
5. Mixed Mallee heath; and
6. Regrowth *Eucalyptus* woodland over mixed shrubs (Botanica Consulting, 2011).

Aerial photography suggests that the described vegetation types are locally common and occur adjacent to the application areas (GIS Database). It could therefore be expected that the main fauna habitats are also common and occur outside of the application area. There are large areas of intact vegetation outside the application areas and the Southern Cross subregion is largely uncleared, with approximately 96% of pre-European vegetation remaining (Shepherd, 2009; GIS Database).

There are no fauna species listed as Threatened Species under the *Environment Protection and Biodiversity Conservation Act 1999* or specially protected under Western Australian legislation (*Wildlife Conservation Act 1950*) that are known within a 10 kilometre radius of the application areas in the Southern Cross subregion (DEC, 2011; GIS Database). No systematic fauna surveys have been conducted within the application area.

Given the small area proposed to be cleared (0.67 hectares), the lack of significant faunal habitat (GIS Database) and the low impact nature of clearing, it is not likely that the proposed clearing will have any significant impact on biodiversity at a regional scale.

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

Methodology Botanica Consulting (2011)
CALM (2002)
DEC (2011)
Shepherd (2009)
GIS Database:
- Holland 50cm Orthomosaic - Landgate 2004
- Pre-European Vegetation
- 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 at variance to this Principle

The Declared Rare Flora (DRF) species *Banksia sphaerocarpa* var. *dolichostyla* is located within the application area (Botanica Consulting, 2011). A flora survey of the proposed clearing was conducted by Botanica Consulting (2011) on 5 and 6 May 2011. From this survey, the locations of the Declared Rare Flora species *Banksia sphaerocarpa* var. *dolichostyla* have been recorded predominantly in the western side of the application areas (Botanica Consulting, 2011; GIS Database). There is a total of 951 individuals recorded in the vicinity of the proposed exploration at 798 locations (Botanica Consulting, 2011). The proposed clearing will require the removal of a 127 individuals (13.35% of the total population) of *Banksia sphaerocarpa* var. *dolichostyla* (Botanica Consulting, 2011).

Banksia sphaerocarpa var. *dolichostyla* is found occurring over lateric gravel and grey sands with the distribution concentrated along the border of the Eremaean and South-west provinces (DEC, 2011). The local area contains a large population (approximately 951 individuals) of the *Banksia sphaerocarpa* var. *dolichostyla* species (Botanica Consulting, 2011).

Given the low impact nature of the proposed clearing and the relatively small area (0.67 hectares) of native vegetation to be cleared, it is unlikely that the proposed clearing will impact on the conservation status of the DRF species. HR Forrester Pty Ltd will be removing 127 individual species with a permit to take Declared Rare Flora obtained from the Department of Environment and Conservation (Botanica Consulting, 2011).

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

Methodology Botanica Consulting (2011)
DEC (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 there are no Threatened Ecological Communities situated within 100 kilometres 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 1413: Mosaic: Shrublands; acacia, casuarina & melaleuca thicket (Shepherd, 2009; GIS Database).

According to Shepherd (2009), Beard vegetation association 1413 retains approximately 77% of its 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 - Coolgardie | 12,912,204 | 12,707,873 | ~98.42 | Least Concern | 10.87 |
| IBRA Subregion - Southern Cross | 6,010,833 | 5,808,059 | ~96.63 | Least Concern | 16.25 |
| Beard vegetation associations - State | | | | | |
| 1413 | 1,679,917 | 1,252,586 | ~77.56 | Least Concern | 11.43 |
| Beard vegetation associations - Bioregion | | | | | |
| 1413 | 1,061,213 | 1,041,677 | ~98.16 | Least Concern | 16.97 |
| Beard vegetation associations - subregion | | | | | |
| 1413 | 953,238 | 933,702 | ~97.95 | Least Concern | 18.70 |

* 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 not at variance to this Principle

According to available databases, there are no watercourses or wetlands within the application area (GIS Database). The vegetation within the application area is not considered to be growing in association with any watercourse or wetland.

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

Methodology GIS Database:
- Geodata, Lakes
- Hydrography, Linear
- Holland 50cm Orthomosaic - Landgate 2004

(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**

According to available databases, there is one soil type (Ms8) within the application area containing two sub-types (GIS Database):

- i. depositional slopes, sandy yellow earths containing some ironstone gravels at depths below 6-7 feet; and
- ii. erosional ridges and slopes, ironstone gravels all underlain by hardened mottled-zone material by depths of 12-24 inches (DAFF, 2008).

The application area is on soil sub-type (i) depositional slope (GIS Database).

Sandy earths have a moderate to high risk of wind erosion while ironstone gravels have a low to moderate risk of wind erosion (Schoknecht, 2002). However, the linear nature of the clearing suggests that the potential for wind erosion is low.

Rainfall in the area is low (341.2 millimetres/year) and run-off is expected to be low due to a high pan evaporation rate (1,800 millimetres/year) and the moderate permeability of soils present (BoM, 2011; GIS Database). Therefore, the risk of water erosion is likely to be minimal.

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

Methodology BoM (2011)
DAFF (2008)
Schoknecht (2002)
GIS Database:
- Soils - Statewide

(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 Lake Cronin Nature Reserve, located approximately 11 kilometres south-east of the application area (GIS Database).

Given the low impact nature of the project and the distance of the application area from Lake Cronin Nature Reserve, 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 is not likely to be at variance to this Principle**

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The application area is located within the proclaimed Kondinin-Ravensthorpe 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.

There are no permanent watercourses or water bodies within the application area (GIS Database). Any surface water within the application area is likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

Given the low impact nature of the proposed clearing activities, the proposed clearing is not likely to cause deterioration in the quality of any underground water.

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

Methodology GIS Database:
- Geodata, Lakes
- Groundwater Salinity, Statewide
- Hydrography, Linear
- Public Drinking Water Source 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 experiences an arid to semi-arid warm Mediterranean climate with mainly winter rainfall (CALM, 2002), where the annual evaporation rate exceeds the annual rainfall (BoM, 2011). Any surface water resulting from normal rain events is expected to be short lived.

The application area is located within the Avon River catchment area which covers a total area of approximately 2,839,267 hectares (GIS Database). The proposed clearing of 0.67 hectares is not likely to cause or exacerbate the incidence or intensity of floods in the catchment or local areas.

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

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

Comments

There is one Native Title claim over the area under application (WC00/7). 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 31 October 2011 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received in relation to this application regarding Aboriginal heritage issues. A written response was provided on the matters raised.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Filed at the Federal Court

4. References

- BoM (2011) Climate Statistics for Australian Locations. A Search for Climate Statistics for Hyden, Australian Government Bureau of Meteorology, viewed 10 November 2011, <http://reg.bom.gov.au/climate/averages/tables/cw_010568.shtml>.
- Botanica Consulting (2011) Level 1 Flora and Vegetation Survey - Stormbreaker Region. Prepared for Hannans Reward Ltd, May 2011.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Coolgardie 2 (COO2 - Southern Cross subregion) Department of Conservation and Land Management, Western Australia.
- DAFF (2008) Department of Agriculture, Fisheries and Forestry - Digital Atlas of Australian Soils (Archive Data), viewed 10 November 2011 < <http://www.daff.gov.au/brs/data-tools/daas-download>>.
- DEC (2011) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 1 December 2011, <<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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Schoknecht N. (2002) Soil Groups of Western Australia. A simple guide to the main soils of Western Australia. Resource Management Technical Report 246. Edition 3.

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.