



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5468/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Traka Resources Limited

1.3. Property details

Property: Exploration Licence 69/2448
Local Government Area: Musgraves Project
Colloquial name: Shire of Ngaanyatjarra

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: 14 March 2013
Decision Date: Grant

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. Three Beard vegetation associations have been mapped within the application area:

Beard vegetation association 19: Low woodland; mulga between sandridges

Beard vegetation association 92: Hummock grasslands, sparse tree steppe; bloodwood over hard spinifex *Triodia basedowii*; and

Beard vegetation association 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex (Government of Western Australia, 2011; GIS Database).

No vegetation surveys have been undertaken over the application area; therefore vegetation communities have not been described or mapped for this area in any further detail than Beard vegetation mapping.

Clearing Description

Traka Resources Limited has applied to clear up to 19.1 hectares of native vegetation within a total application area of approximately 50,400 hectares for the purpose of mineral exploration. The clearing will comprise of drill pads and drill line tracks. The exploration activities are part of Traka Resources Limited's exploration drilling program in the Musgraves area, approximately 644 kilometres north of Eucla.

Vegetation Condition

The vegetation will be cleared using a dozer, blade raised, with vegetation stockpiled for use in rehabilitation. Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment

The vegetation condition has been inferred from orthophotos, field photographs and historical land uses classified using 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 Mann-Musgrave Block subregion of the Central Ranges IBRA bioregion (GIS Database). The Mann-Musgrave Block subregion is characterised by sandplains that support low open woodlands of either Desert Oak or Mulga over *Triodia basedowii* hummock grasslands. Low open woodlands of Ironwood (*Acacia estrophiolata*) and Corkwoods (*Hakea* spp.) over tussock and hummock grasses often fringe the ranges. The ranges support mixed wattle scrub or *Callitris glaucophylla* woodlands over hummock and tussock grasslands (CALM, 2002).

There were no flora surveys conducted over the application area. According to available databases there are no known records of Threatened Flora, Threatened Ecological Communities or Priority Ecological Communities within the application areas or within a 30 kilometre radius of the application areas (DEC 2013; GIS Database).

A search on the Department of Environment and Conservation's Threatened and Priority Flora databases within a 30 kilometre radius of the application areas revealed three Priority flora species: *Vittadinia pustulata* (Priority 2), *Calotis latiuscula* (Priority 3) and *Eucalyptus sparsa* (Priority 3) (DEC, 2013). The level of biological knowledge of the Central Ranges bioregion is relatively low (CALM, 2002). 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, 2013) 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 two potential broad fauna habitat types within the application area, these being: mulga plain and sand dune/sand plain (GIS Database). Both are considered to be in 'very good' condition (GIS Database; Keighery, 1994). Due to the remote location and lack of studies there is limited information on the faunal assemblages within the Central Ranges bioregion.

The shortage of biological survey data from the area, both supplied by the applicant and available from other sources, brings a level of uncertainty when assessing the level of biological diversity of the application area. However, the broad-scale vegetation types and fauna habitat types are common and widespread both locally and regionally. 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 (19.1 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 (2013)
ENV Australia (2011)
Keighery (1994)
GIS Database:
- Bates 1.25m Orthomosaic - Landgate 2002
- BellRock 1.25m Orthomosaic - Landgate 2002
- Blackstone 1.25m Orthomosaic - Landgate 2002
- Holt 1.25m Orthomosaic - Landgate 2002
- 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 may be at variance to this Principle

No fauna surveys were undertaken over the application area. ENV Australia (2011) conducted a desktop fauna review of an area adjacent to the application area in January 2011. The review identified two broad fauna habitat types from aerial photography (GIS Database):

1. Mulga Plain - consists of low open woodlands of mulga (*Acacia aneura*) over *Triodia basedowii* occurring in low lying areas. A moderate diversity of microhabitats is expected, with tree hollows, logs, leaf litter and debris and soil suitable for digging and burrowing animals; and
2. Sand Dune/Sand Plain - consist of low shrublands of mulga (*Acacia aneura*) and Marble Gum (*Eucalyptus gongylocarpa*) over *Triodia basedowii*. Microhabitat diversity is expected to be low, with logs, debris and litter being scarce. Areas of loose sand within this habitat would be ideal for burrowing fauna (ENV Australia, 2011; GIS Database).

Analysis of aerial photography suggests the vegetation to be in 'very good' condition (Keighery, 1994; GIS Database). The desktop flora survey and aerial photography suggest significant fauna habitat may be present within the application area within the mulga plain and sand dunes/sand plain (ENV Australia, 2011; GIS Database). Analysis of aerial imagery demonstrates that the local area remains largely uncleared. The vegetation communities and associated fauna habitats are considered common and widespread in the local area, and throughout the Central Ranges IBRA bioregion (GIS Database).

There are three species of mammals, two species of bird and one reptile listed as 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 the application area based on habitat type and vegetation mapping associated with the tenement (DEC, 2013; ENV Australia, 2011). These are; the Malleefowl (*Leipoa ocellata*), Australian Bustard (*Ardeotis australis*), Brush-tailed Mulgara (*Dasymercus blythi*), Greater Bilby (*Macrotis lagotis*), Northern Marsupial Mole (*Notoryctes typhlops*) and the Great Desert Skink (*Liopholis kintorei*) (DEC, 2013; ENV Australia, 2011). These species may occupy areas within the application area due to potential suitable faunal habitats occurring in the area (DEC, 2013; ENV Australia, 2011).

Some of these species are considered highly mobile and/or have a wide distribution so the clearing is unlikely to significantly impact on the species (ENV Australia, 2011). There have only been historical records of Malleefowl sightings or mounds, therefore these are not expected to be in the surrounding area. However, the Brush-tailed Mulgara, Greater Bilby and Northern Marsupial Mole are ground-dwelling conservation significant fauna with limited dispersal abilities and are more likely to be impacted on by any development (ENV Australia, 2011). Fauna habitat such as mulga plains with potential tree hollows, logs or leaf litter is suitable for conservation significant fauna such as the Brush-tailed Mulgara (*Dasyercus blythi*) and the Greater Bilby (*Macrotis lagotis*) that may potentially occur in the area (ENV, 2011). The sand dunes/sand plains habitats are suitable habitats for burrowing for the Great Desert Skink (*Liopholis kintorei*) (McAlpin, 1998). Therefore, any core habitats such as burrows could be considered as significant and should be avoided.

The area proposed to be cleared is relatively small (19.1 hectares), spread over a large application area, and there are large amounts of uncleared vegetation in the Central Ranges. However, there is very little biological knowledge of the region. Only limited fauna information is available for the Musgraves subregion due to a lack of fauna surveys being completed in the remote region (ENV Australia, 2011). The conservation values of the application area in regards to fauna, in particular conservation significant species, are uncertain and cannot be fully understood until on-ground fauna surveys are conducted. Potential impacts to conservation significant fauna as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

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

Methodology CALM (2002)
DEC (2013)
ENV Australia (2011)
Keighery (1994)
McAlpin (1998)
GIS Database:
- Bates 1.25m Orthomosaic - Landgate 2002
- BellRock 1.25m Orthomosaic - Landgate 2002
- Blackstone 1.25m Orthomosaic - Landgate 2002
- Holt 1.25m Orthomosaic - Landgate 2002
- IBRA WA (regions - subregions)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposal may be at variance to this Principle**
No flora survey has been conducted within the application area.

Searches made on the available GIS Databases reveal that there are no known records of Threatened Flora existing in the application area, or within 20 kilometres of the application area (GIS Database). A search of the Department of Environment and Conservation's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 30 kilometre radius of the application area (DEC, 2013).

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 and the general paucity of biological information in the bioregion. 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 may be at variance to this Principle.

Methodology DEC (2013)
GIS Database:
- Threatened 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 showed that there are no known Threatened Ecological Communities recorded 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 Central Ranges IBRA bioregion (GIS Database). The vegetation within the application area is recorded as:

Beard vegetation association 19: Low woodland; mulga between sandridges

Beard vegetation association 92: Hummock grasslands, sparse tree steppe; bloodwood over hard spinifex *Triodia basedowii*; and

Beard vegetation association 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex (Government of Western Australia, 2011; GIS Database).

Beard vegetation associations 19, 92 and 236 retain approximately 99% of their pre-European extent within the bioregion (Government of Western Australia, 2011). The area proposed to be cleared is not a significant remnant of native vegetation.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Central Ranges	4,701,520	4,700,200	~99.97	Least Concern	-
IBRA Subregion - Mann-Musgrave Block	4,701,520	4,700,200	~99.97	Least Concern	-
Beard vegetation associations - State					
19	4,385,295	4,384,250	~99.98	Least Concern	0.11
92	152,002	151,091	~99.40	Least Concern	-
236	1,626,899	1,617,314	~99.41	Least Concern	-
Beard vegetation associations - Bioregion					
19	902,251	902,170	~99.99	Least Concern	-
92	123,656	123,186	~99.62	Least Concern	-
236	2,244	2,244	~100.00	Least Concern	-

* Government of Western Australia (2011)

** 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)
Government of Western Australia (2011)
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

(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 Central Ranges bioregion is widely affected by the grazing of feral camel herds, with the camel population increasing exponentially each year (Ward, 2007). Damage by camels is evident in the number of damaged shrubs and trees, such as the local hakeas which are severely damaged or killed by persistent grazing (ENV Australia, 2011).

Traka Resources has proposed to clear 19.1 hectares of native vegetation, distributed over a large application area of approximately 50,400 hectares. Disturbance will be for access tracks and drill pads using machinery with the blade up to ensure soil is not removed, which 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 ENV Australia (2011)
Ward (2007)

(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 areas (GIS Database). The nearest conservation area is the Gibson Desert Nature Reserve, located approximately 160 kilometres north-west of the application areas (GIS Database). Given the distance separating Gibson Desert Nature Reserve and the application areas, the proposed clearing is not likely to impact the environmental values of the conservation area.

The application areas occur within the Ranges of the Western Desert Environmentally Sensitive Area (Register of National Estate) (GIS Database). According to the Australian Heritage Database (2013) the Ranges of the Western Desert are a system of ranges with many gorges and valleys. The ranges are dominated by spinifex steppe, mulga and mallee scrub (Australian Heritage Database, 2013). Despite the area being on the Register of National Estate for natural values, it is considered that the proposed clearing is low impact and of a small scale and will not significantly impact on the environmental values of the area.

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

Methodology Australian Heritage Database (2013)
GIS Database:
- DEC Tenure
- Register of National Estate

(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 (GIS Database). The application areas are located within the proclaimed East Murchison groundwater area under the *Rights in Water and Irrigation Act 1914* (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 areas 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 areas.

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
- 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 experiences an arid climate with slightly higher winter rainfall (CALM, 2002), with an annual average of approximately 285.6 millimetres per year (CALM, 2002; BoM, 2013). Based on an average annual evaporation rate of 3,200 - 3,800 millimetres (BoM, 2013), any surface water resulting from rainfall events is likely to be relatively short lived.

The application areas are located within the Warburton Basin catchment area which covers a total area of approximately 17,195,990 hectares (GIS Database). The proposed clearing of 19.1 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 (2013)
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. The claim WC04/3 was determined by the Federal Court on 29 June 2005. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

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

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

The clearing permit application was advertised on 18 February 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Determined by the Federal Court

4. References

- Australian Heritage Database (2013) Department of Sustainability, Environment, Water, Population and Communities, viewed 1 March 2013, <<http://www.environment.gov.au/heritage/index.html>>.
- BoM (2013) Climate Statistics for Australian Locations. A Search for Climate Statistics for Giles Meteorological Office, Australian Government Bureau of Meteorology, viewed 1 March 2013, <http://reg.bom.gov.au/climate/averages/tables/cw_013017.shtml>.
- CALM (2002) Biological Summary of the 2002 Biodiversity Audit for Western Australia, A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002 - Central Ranges 1 (CR1) - Mann-Musgrave Block subregion), ed. N.L McKenzie, J.E May and S. McKenna, Government of Western Australia, Perth, Western Australia.
- DEC (2013) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 1 March 2013, <<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.
- ENV Australia (2011) Musgraves Flora and Fauna Desktop Review. Unpublished report prepared for Traka Resources Limited, January 2011.
- Government of Western Australia (2011) 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- McAlpin, S. (1998). Establishing a surveillance and monitoring program for Tjakura, *Egernia kintorei*, at Uluru - Kata Tjuta National Park. Page(s) 1-19. Canberra: Environment Australia.
- Ward, B (2007) Feral Camel Distribution and Abundance of the Warburton Central Ranges and Northern Great Victoria Desert. Draft report Department of Environment and Conservation Perth WA.

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.