



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3636/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Navigator (Bronzewing) Pty Ltd

1.3. Property details

Property: Mining Lease 36/82
Local Government Area: Shire of Leonora
Colloquial name: Challenger South Pit

1.4. Application

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

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 at a 1:250,000 scale for the whole of Western Australia and are useful to look at vegetation in a regional context. The following Beard Vegetation Association is located within the application area (GIS Database):

39: Shrublands; mulga scrub.

A flora and vegetation survey of the application area was conducted by Outback Ecology in July 2007. The following 14 vegetation communities were identified (Outback Ecology, 2010):

1. *Acacia aneura* var. *?intermedia* and *Acacia aneura* var. *?microcarpa* Open Low Woodland B over *Ptilotus obovatus* Open Dwarf Scrub C;
2. *Acacia aneura* var. *?microcarpa* Low Woodland A over *Sida calyxhymenia* Open Dwarf Scrub C over *Eragrostis eripoda* Very Open Low Grass;
3. *Acacia aneura* var. *?microcarpa* and *Acacia aneura* var. *?intermedia* Open Low Woodland B over *Eremophila shonae* ssp. *shonae* Dwarf Scrub C;
4. *Acacia aneura* var. *?microcarpa* and *Acacia quardrimarginea* Scrub over *Baeckea* sp. *Melita Station* Low Scrub A;
5. *Acacia rhodophloia* Open Low Woodland B over *Ptilotus obovatus* Dwarf Scrub D;
6. *Acacia quadrimarginea*, *Acacia aneura* var. *?microcarpa* and *Acacia aneura* var. *?intermedia* Low Woodland B over *Eremophila platycalyx* ssp. *platycalyx* Open Low Scrub A over *Eremophila forrestii* and *sida calyxhymenia* Open Dwarf Scrub C;
7. *Acacia aneura* var. *?microcarpa* and *Acacia aneura* var. *?intermedia* Low Forest A to Low Woodland A over *Acacia tetragonophylla* open Low Woodland B over *Sida calyxhymenia* Heath B to Open Dwarf Scrub C over *Ptilotus obovatus* Open Dwarf Scrub C over *Aristida contorta* and *Enneapogon caerulescens* Very Open Low Grass;
8. *Acacia burkittii* Low Woodland A over *Acacia tetragonophylla* Open Scrub over *Sida calyxhymenia* and *Ptilotus obovatus* Open Dwarf Scrub C;
9. *Acacia aneura* var. *?microcarpa* Low Woodland B over *Hakea recurva* Low Scrub A over *Senna artemisioides* ssp. *x sturtii* Low Scrub B over *Maireana georgei* Open Dwarf Scrub D;
10. *Hakea recurva* Open Low Woodland A over *Acacia aneura* var. *?microcarpa*, *Acacia aneura* var. *?intermedia* and *Acacia burkittii* Low Woodland B over *Grevillea sarissa* ssp. *succinct*, *Senna artemisioides* ssp. *nemophila* and *Scaevola spinscens* Open Low Scrub A over *Ptilotus obovatus* and *Sida calyxhymenia* Open Dwarf Scrub C;
11. *Hakea aneura* var. *aneura* Low Woodland B to Open Low Woodland B with occasional emergents of *Acacia pruinoarpa*;
12. *Acacia aneura* var. *aneura* Scrub over *Eremophila ramiflora* Open Low Scrub A;

13. *Acacia aneura* var. *aneura* Open Low Woodland B over a sparse understorey; and

14. *Acacia oswaldii* Open Low Woodland A over *Eremophila platycalyx* ssp. *platycalyx* and *Grevillea sarissa* ssp. *succinct* Open Scrub over *Maireana georgei* Open Dwarf Scrub D over *Sclerolaena ericantha* Open Herbs over *Enneapogon caeruleus* Very Open Low Grass.

Clearing Description Navigator (Bronzewing) has applied to clear up to 25 hectares within an application area of approximately 61.5 hectares (GIS Database). The application area is located approximately 46 kilometres north-east of Leinster (GIS Database).

The purpose of the application is the extension of the existing Challenger Pit and waste landform (Outback Ecology, 2010). Clearing will be by mechanical means. Topsoil and vegetation will be retained for use in rehabilitation (Outback Ecology, 2010).

Vegetation Condition Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
to
Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment The vegetation condition was assessed by botanists from Outback Ecology.
The application area has been subjected to previous disturbance from exploration and mining activities (Outback Ecology, 2010).

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 Eastern Murchison Interim Biogeographic Regionalisation of Australia (IBRA) subregion (GIS Database). This subregion is described by CALM (2002) as being rich and diverse in both its flora and fauna. CALM (2002) reports that most species are wide ranging and usually occur in at least one, and often several, adjoining regions.

A flora and vegetation survey of the application area identified 14 vegetation communities (Outback Ecology, 2010). Much of the vegetation within the application area is in a 'degraded' state due to past mining activities and historic grazing (Outback Ecology, 2010). The survey recorded a total of 57 flora species including the weed species Ruby Dock (*Acetosa vesicaria*) and Roly-Poly (*Salsola tragus*) (Outback Ecology, 2010).

The vegetation and fauna habitat within the application area are common throughout the local area and given its disturbed state, it is not likely to comprise a higher level of floral or faunal diversity than nearby undisturbed areas.

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

Methodology CALM (2002)
Outback Ecology (2010)
GIS Database
- IBRA WA (Regions – Sub Regions)

(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 formal fauna surveys have been conducted over the application area. Ninox Wildlife Consulting undertook fauna assessments of the Bronzewing and Mt McClure project areas, which area approximately 20 kilometres north and north-east of the application area, in 1989 and 1993 respectively. No conservation significant species were recorded during these studies, however, the following species were identified as potentially occurring within the area (Outback Ecology, 2010):

- Crest-tailed Mulgara (*Dasyercus cristicauda*) – Vulnerable;
- Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4;
- Princess Parrot (*Polytelis alexandrae*) – Priority 4; and
- Peregrine Falcon (*Falco peregrinus*) – Schedule 4.

At the Mt McClure project area Ninox Wildlife Consulting identified creeklines, part mulga complexes, low hills complex and breakaway complexes as being the major habitat types (Outback Ecology, 2010). It would be expected that the application area would exhibit similar habitats. Much of the vegetation of the application area has been previously disturbed and degraded by past mining and grazing activities (Outback Ecology, 2010). Given the historical use of the area, and the extent of uncleared land in the surrounding landscape, it is not likely that the proposed clearing area represents significant habitat for native fauna.

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

Methodology Outback Ecology (2010)

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

Comments Proposal is not likely to be at variance to this Principle

According to available databases, there are no records of Declared Rare Flora (DRF) within the application area (GIS Database). Outback Ecology conducted a flora and vegetation survey of the application area on 11 - 12 July 2007. No DRF was recorded during this survey (Outback Ecology, 2010).

Two species of Priority Flora were recorded within the application area:

- *Baeckea sp. Melita Station* (Priority 4)
- *Eremophila pungens* (Priority 4)

There were 77 individuals of *Baeckea sp. Melita Station* and 133 individuals of *Eremophila pungens* recorded within the application area (Outback Ecology, 2010). Of these only 8 *Eremophila pungens* and 55 *Baeckea sp. Melita Station* individuals are proposed to be cleared (Outback Ecology, 2010).

Baeckea sp. Melita Station is found throughout the Murchison bioregion and recorded from thirteen populations within the local area (Outback Ecology, 2010; Western Australian Herbarium, 2010). It has been estimated that there is in excess of 2,000 plants in the local area (Outback Ecology, 2010).

Eremophila pungens has been recorded from the Murchison and Gascoyne bioregions (Western Australian Herbarium, 2010). A survey search conducted in August 2006 located over 4,500 plants in the local area (Outback Ecology, 2010). Subsequent opportunistic sightings indicate that this species is relatively widespread within the local area (Outback Ecology, 2010).

The DEC has endorsed Navigator (Bronzewing)'s proposal to remove 8 *Eremophila pungens* and 55 *Baeckea sp. Melita Station* individuals, and considers that the removal of these plants will result in minimal impact on the population (DEC, 2007; 2010).

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

Methodology DEC (2007)
DEC (2010)
Outback Ecology (2010)
Western Australian Herbarium (2010)
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

According to available databases, there are no Threatened Ecological Communities (TEC's) within the application area (GIS Database). The vegetation survey did not identify any vegetation communities described as a TEC (Outback Ecology, 2010).

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

Methodology Outback Ecology (2010)
GIS Database
- Threatened Ecological Sites
- 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 Murchison Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 100% of the Pre-European vegetation remains (see table) (GIS Database; Shepherd, 2007).

The vegetation of the application area has been mapped as the following Beard Vegetation Association (GIS Database):

39: Shrublands; mulga scrub.

According to Shepherd (2007) approximately 100% of this Beard Vegetation Association remains at both a

state and bioregional level. Therefore the area proposed to be cleared does not represent a significant remnant of native vegetation within 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 (and post clearing %)*
IBRA Bioregion – Murchison	28,120,589	28,120,589	~100	Least Concern	1.06 (1.06)
Beard veg assoc. – State					
39	6,613,568	6,613,460	~100	Least Concern	7.2 (7.2)
Beard veg assoc. – Bioregion					
39	1,148,400	1,148,400	~100	Least Concern	0 (0)

* Shepherd (2007)

** Department of Natural Resources and Environment (2002)

Options to select from: Bioregional Conservation Status of Ecological Vegetation Classes (Department of Natural Resources and Environment 2002)

Presumed extinct	Probably no longer present in the bioregion
Endangered	<10% of pre-European extent remains
Vulnerable	10-30% of pre-European extent exists
Depleted	>30% and up to 50% of pre-European extent exists
Least concern	>50% pre-European extent exists and subject to little or no degradation over a majority of this area

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

Methodology Department of Natural Resources and Environment (2002)
Shepherd (2007)
GIS Database
- IBRA WA (Regions – Sub Regions)
- 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 likely to be at variance to this Principle**
According to available databases, there are two minor, non perennial watercourses within the application area (GIS Database). The vegetation survey did not identify any riparian vegetation (Outback Ecology, 2010). These drainage lines would only flow following heavy rainfall (Outback Ecology, 2010).

These drainage lines are located in the north-west and south-east corners of the application area (GIS Database). It is anticipated that the proposed clearing will not disturb these drainage lines (Outback Ecology, 2010). Should vegetation be cleared from these watercourses it is not likely to have a significant impact as they only slightly extend into the application area.

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

Methodology Outback Ecology (2010)
GIS Database
- Hydrography, linear

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

Comments **Proposal is not likely to be at variance to this Principle**
According to available databases, the application area is comprised of the Bevon and Felix land systems (GIS Database). The Felix land system's stone mantles provide effective protection of the soil against erosion (Pringle et al., 1994). There are minor areas within the Bevon land system on breakaway footslopes and drainage tracts that are susceptible to soil erosion if cleared or the surface is disturbed (Pringle et al., 1994). As the clearing will occur on low rises and stony plains, it is unlikely the proposed clearing will lead to appreciable erosion.

At a broad scale, the surface soil pH in the application area ranges from 5.5 to 6.0 and there is no known occurrence of acid sulphate soils (CSIRO, 2009). The average annual evaporation rate is 12 times the average annual rainfall, so it is unlikely the proposed clearing will result in increased groundwater recharge

causing raised saline water tables (GIS Database).

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

Methodology CSIRO (2009)
Pringle et al. (1994)
GIS Database
- Evaporation Isopleths
- Rainfall, mean annual
- 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

According to available databases, the application area is not located within a conservation area or any DEC managed lands (GIS Database). The nearest conservation reserve is the Wanjarri Nature Reserve, located approximately 18 kilometres north-west of the application area (GIS Database). Based on the distance between the proposed clearing and the nearest conservation area, the project is not likely to impact the environmental values of any conservation area.

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

Methodology GIS Database
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments Proposal is not likely to be at variance to this Principle

According to available databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). There are no permanent waterbodies or watercourses within the application area, however, there are two minor non perennial watercourses that pass through the corners of the application area (GIS Database).

The annual average rainfall for the application area is 300 millimetres and the average annual evaporation rate is 3,600 millimetres (GIS Database). Therefore, during normal rainfall events surface water within the application area is likely to evaporate quickly. However, substantial rainfall events create surface sheet flow which is likely to have a higher level of sediments. During normal rainfall events, the proposed clearing would not likely lead to an increase in sedimentation of watercourses within the application area.

The groundwater salinity within the application area is between 1,600 – 2,100 milligrams per litre of Total Dissolved Solids (TDS) (Outback Ecology, 2010). This is considered to be brackish but still suitable for livestock. The proposed clearing is not likely to cause salinity levels within the application area to alter.

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

Methodology Outback Ecology (2010)
GIS Database
- Evaporation Isopleths
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSA's)
- Rainfall, mean annual

(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

With an average annual rainfall of 300 millimetres and an average evaporation rate of 3,600 millimetres there is likely to be little surface flow during normal seasonal rains (GIS Database). Given the likelihood of little surface flow, the proposed clearing of 25 hectares is not likely to cause or increase the incidence or intensity of flooding.

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

Methodology GIS Database
- Evaporation Isopleths
- Rainfall, mean annual

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

Comments

There are no native title claims over the area under application (GIS Database). The mining tenement 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*.

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

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

The clearing permit application was advertised on 29 March 2010 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology GIS Database
- Aboriginal Sites of Significance
- Native Title Claims

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and the proposed clearing is not likely to be at variance to Principles (a), (b), (c), (d), (f), (g), (h), (i) and (j) and is not at variance to Principle (e).

5. References

- Commonwealth Scientific and Industrial Research Organisation (2009) Australian Soil Resource Information System. Available online at: http://www.asris.csiro.au/index_ie.html Accessed on 27 April 2010.
- Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.
- Department of Environment and Conservation (2007) Letter to Belinda Jeanes of Outback Ecology, 9 October 2007.
- Department of Environment and Conservation (2010) Letter to Sarah Breheny of Outback Ecology, 30 March 2010.
- 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.
- Outback Ecology (2010) Bronzewing - Mt McClure; Application for a Purpose Permit to Clear Vegetation at the Bronzewing - Mt McClure Project: - Challenger South Pit M36/82. Unpublished report for Navigator (Bronzewing) Pty Ltd.
- Pringle, H.J.R, Van Vreeswyk, A.M.E. and Gilligan, S.A. (1994) An inventory and condition survey of rangelands in the north-eastern Goldfields, Western Australia, Technical Bulletin No. 87., Department of Agriculture, South Perth, Western Australia.
- Shepherd, D.P. (2007) 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.
- Western Australian Herbarium (2010) Florabase - The Western Australian Flora. Department of Environment and Conservation. Available online at <http://florabase.dec.wa.gov.au/> Accessed on 26 April 2010.

6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAFWA	Department of Agriculture and Food, Western Australia.
DA	Department of Agriculture, Western Australia.
DEC	Department of Environment and Conservation
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), 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, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
DoW	Department of Water
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
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	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

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.