



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5211/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Becker Underwood Pty Ltd

1.3. Property details

Property: General Purpose Lease 70/207
Mining Lease 70/1158
Local Government Area: Shire of Manjimup
Colloquial name:

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 2 | | Slashing | A fire break |

1.5. Decision on application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Three Beard vegetation associations have been mapped within the application area (GIS Database):

3: Medium forest; jarrah-marri.

27: Low woodland; paperbark (*Melaleuca* sp.).

126: Bare areas; freshwater lakes.

The application area has also been mapped as Mattiske vegetation complex YR (Mattiske and Havel, 1998):

YR: Mosaic of open woodland of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*, open woodland of *Melaleuca cuticularis*, open woodland of *Melaleuca preissiana*-*Banksia littoralis*-*Banksia seminuda*, tall shrubland of *Myrtaceae* spp. and sedgelands on broad depressions in humid and subhumid zones.

A site inspection was conducted by the assessing officer on 26 September 2012. The assessing officer observed the area to be predominately *Eucalyptus* and *Melaleuca* woodland (DMP, 2012).

Clearing Description

Becker Underwood Pty Ltd has applied to clear up to two hectares of native vegetation within an application area of approximately 2.96 hectares (GIS Database). The application is to establish a firebreak around a wetland. The application area is located approximately 50 kilometres south east of Manjimup (GIS Database).

The area will be cleared using a slashing technique.

Vegetation Condition

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

to

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

Comment

The condition of the vegetation was determined by the assessing officer based on a site inspection and using aerial photography.

The application area has been previously cleared for a firebreak, however, there has been a large amount of regeneration of previously cleared areas (DMP, 2012).

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 proposed clearing is for a firebreak around a seasonally inundated peat wetland. Peat swamp

communities within the Southern Jarrah Forrest bioregion are known to contain local endemic species of significance (CALM, 2002). The vegetation within the application area is in 'very good' to 'excellent' condition (DMP, 2012; Keighery, 1994). Part of the application area has been previously cleared for a fire break but has since had vegetation regrow over it.

There are no records of any Threatened or Priority Ecological Communities within the application area or the local area (ten kilometre radius) (GIS Database).

Numerous Threatened and Priority Flora species have been mapped within the local area on the same vegetation and soil types as the application area (DEC, 2012). Threatened Flora has been mapped as close as 200 metres from the application area (GIS Database).

A search of NatureMap (DEC, 2012) reveals records of nine amphibian species, 140 avian species, 16 mammal species, 20 reptile species, three fish species and 92 invertebrate species. Many of these fauna species are of conservation significance.

Given the condition of the vegetation and the flora and fauna species that are potentially present, the application area may have a high level of biodiversity.

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

Methodology CALM (2002)
DEC (2012)
DMP (2012)
Keighery (1994)
GIS Database:
- Threatened Ecological Sites Buffered
- Threatened and Priority Flora

(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

A site inspection of the application area was conducted by the assessing officer on 26 September 2012. The assessing officer observed the area to be predominately Eucalyptus and Melaleuca woodland (DMP, 2012). There are a number of large Eucalypt trees within the application area that have the potential to be significant habitat trees for fauna species (DMP, 2012). There were a number of diggings observed within the application area that may have been made by Quenda (*Isodon obesulus fusciventer* – Priority 5).

A number of conservation significant fauna species have been recorded within ten kilometres of the application area including the following species all listed as 'rare or likely to become extinct' under the *Wildlife Conservation Act 1950* (DEC, 2012):

- Woylie (*Bettongia penicillata* subsp. *ogilbyi*)
- Muir's Corella (*Cacatua pastinator* subsp. *pastinator*)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii* subsp. *naso*)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*)
- Carnaby's Cockatoo (*Calyptorhynchus latirostris*)
- Chuditch (*Dasyurus geoffroi*)
- Western Mud Minnow (*Galaxiella munda*)
- Numbat (*Mymecobius fasciatus*)
- Balston's Pygmy Perch (*Nannatherina balstoni*)
- Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*)
- Western Ringtail Possum (*Pseudocheirus occidentalis*)
- Quokka (*Setonix brachyurus*)

The assessing officer observed several Black Cockatoos flying overhead during a site inspection of the application area (DMP, 2012). There are a number of large Eucalypt trees within the application area which could potentially contain hollows. The purpose of the proposed clearing is to reclear areas that have been cleared previously for a firebreak. This regrowth is to be cleared by slashing, therefore, the clearing will have minimal impact on larger habitat trees in the area.

The application area is located adjacent to Nature Reserves and State forest, so there are large areas that remain uncleared in the local area (GIS Database). Given the large amount of vegetation remaining in the local area and the low impact method of clearing, the proposed clearing is not likely to have a significant impact on local fauna. The impact of fire within the peat wetland is likely to have a much greater impact on local fauna than the clearing for a firebreak.

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

Methodology DEC (2012)
DMP (2012)

GIS Database:
- DEC Tenure
- Tonebridge 50cm Orthomosaic

(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

According to available databases, there are no records of Threatened Flora within the application area (DEC, 2012; GIS Database). However, there are records of the following three Threatened Flora species within two kilometres of the application area (DEC, 2012):

- *Caladenia christineae*
- *Caladenia harringtoniae*
- *Diurus drummondii*

All three species are known from the margins of lakes and swamps, therefore, may be present within the application area (Western Australian Herbarium, 2012). The applicant has advised that the area will be cleared via slashing which will cause minimal ground disturbance. This method of clearing may cut the tops of the Threatened Flora however the plant itself will not be killed.

The proposed clearing may be at variance to this principle.

Methodology DEC (2012)
Western Australian Herbarium (2012)
GIS Database:
- Threatened and Priority Flora

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

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

According to available databases, there are no Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest recorded TEC is over 60 kilometres from 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 Jarrah Forrest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 55% of the pre-European vegetation remains (see table) (GIS Database, Government of Western Australia, 2011).

The vegetation of the application area has been mapped as Beard vegetation associations 3, 27 and 126 (GIS Database). Both Beard vegetation associations 3 and 27 have over 60% remaining at a State and Bioregional level (Government of Western Australia, 2011). Beard vegetation association 126 has less than 30% remaining in the Jarrah Forrest IBRA bioregion (Government of Western Australia, 2011). The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30% of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Whilst there is less than 30% of vegetation association 126 within the bioregion, there are no areas of bare areas of freshwater lakes within the application area (GIS Database). As the application area is not representative of this vegetation association, the proposed clearing will not have an impact on its remaining extent.

Aerial imagery indicates that the local area (10 kilometre radius) retains approximately 70% vegetation (GIS Database). The vegetation within the application area itself is neither a remnant nor does it form part of any remnants within the local area (GIS Database).

| | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Pre-European % in IUCN Class I-IV Reserves |
|--|-------------------------|----------------------|--------------|-----------------------|--|
| IBRA Bioregion – Jarrah Forrest | 4,506,656 | 2,473,599 | ~54.9 | Least Concern | 14.06 |
| IBRA Subregion - Southern Jarrah Forrest | 2,607,876 | 1,349,386 | ~51.7 | Least Concern | 16.96 |
| Local Government - Shire of Manjimup | 697,369 | 589,098 | ~84.5 | Least Concern | 52.44 |
| Beard veg assoc. – State | | | | | |
| 3 | 2,661,405 | 1,844,285 | ~69.3 | Least Concern | 18.49 |
| 27 | 130,384 | 95,416 | ~73.2 | Least Concern | 54.43 |
| 126 | 23,503 | 9,957 | ~42.4 | Depleted | 46.46 |
| Beard veg assoc. – Bioregion | | | | | |
| 3 | 2,390,591 | 1,641,271 | ~68.7 | Least Concern | 16.35 |
| 27 | 49,877 | 38,554 | ~77.3 | Least Concern | 50.71 |
| 126 | 9,957 | 2,732 | ~27.4 | Vulnerable | 70.76 |
| Beard veg assoc. – Subregion | | | | | |
| 3 | 1,482,491 | 908,058 | ~61.2 | Least Concern | 18.76 |
| 27 | 49,877 | 38,554 | ~77.3 | Least Concern | 50.71 |
| 126 | 9,957 | 2,732 | ~15.9 | Vulnerable | 70.76 |

* 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 Commonwealth of Australia (2001)
Department of Natural Resources and Environment (2002)
Government of Western Australia (2011)
GIS Database:
- IBRA WA (Regions - Sub Regions)
- Tonebridge 50cm Orthomosaic

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

The application area surrounds a seasonally inundated sumpland associated with Cowerup Swamp (GIS Database). The vegetation within the application area is predominantly Eucalyptus and Melaleuca woodland (DMP, 2012). Cowerup Swamp is part of the Byenup Lagoon system which is listed on the Directory of Important Wetlands in Australia (Environment Australia, 2001; GIS Database). The application area is also located within the Deep River catchment which has been classified as a Priority 2 Wild Rivers area (GIS Database).

Whilst, the vegetation is associated with a wetland of significance, the effect of fire upon peat wetlands would have a greater and longer term impact on the wetland than the clearing for a firebreak (Department of Water, 2012). Given the hydrological inter-connectivity of wetlands in the local area, any fire has the potential to spread between wetlands (Department of Water, 2012).

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

Methodology Department of Water (2012)
DMP (2012)
Environment Australia (2001)
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**
The area under application has been mapped as soil type Cd22, which Northcote (1960-68) describes as flat to gently undulating portions of lateritic plateau at moderate elevation, occasional low hills, chief soils are leached sands, underlain by thick ironstone gravel and boulder layers and mottled kaolinitic clays at depths below 2-5 feet.

The topography of the application area is relatively flat (GIS Database).

Given the small size of clearing (two hectares), soil types present and the topography of the site appreciable land degradation is unlikely to occur.

The proposed clearing is not likely to be at variance to this principle.

Methodology Northcote (1960-68)
 GIS Database:
 - Soils, Statewide
 - Topographic Contours, 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 may be at variance to this Principle**
Part of the application area directly abuts the Tone-Perup Nature Reserve (GIS Database). The proposed clearing for the establishment of a fire break will potentially protect the Nature Reserve from fire. The proposed clearing has the potential to increase the likelihood of weeds and dieback being spread into the Nature Reserve. Potential impacts from dieback and weeds may be minimised by the implementation of a weed and dieback management condition.

The proposed clearing will not disrupt any ecological linkages connected to the Nature Reserve (GIS Database).

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

Methodology GIS Database:
 - DEC Tenure
 - Tonebridge 50cm Orthomosaic

(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 located within the Deep River Public Drinking Water Source Area (PDWSA) (GIS Database). Advice from the Department of Water (2012) indicates that whilst the proposed clearing may have a short term impact on the wetland it surrounds, the effect of fire upon peat wetlands would have a much greater longer term impact. The proposed clearing may result in some short term increase sedimentation levels within seasonally wet areas, however, impacts are likely to be minimal.

The groundwater within the application area is between 3,000 to 7,000 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). This is considered to be brackish. The proposed clearing of two hectares is not likely to alter the salinity levels within the local area.

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

Methodology Department of Water (2012)
 GIS Database:
 - Groundwater Salinity Statewide
 - Hydrography, linear
 - Public Drinking Water Source Areas (PDWSAs)

(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**
Given that the application area surrounds a seasonally inundated sumpland, the proposed clearing of two hectares for the purpose of a firebreak is not likely to increase the incidence or intensity of flooding in the local area (GIS Database).

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

Methodology GIS Database:
- Hydrography, linear

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

Comments

There are two native title claims over the area under application (GIS Database). These claims (WC98/70 and WC96/109) have been registered with the Native Title Tribunal on behalf of the claimant group (GIS Database). 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*.

According to available databases, there is one 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 10 September 2012 by the Department of Mines and Petroleum inviting submissions from the public. There was one submission received stating no objections to the proposed clearing.

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

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Jarrah Forest (JF2 – Southern Jarrah Forest subregion) Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2012) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 19 November 2012, <<http://naturemap.dec.wa.gov.au>>.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Department of Water (2012) Advice for Clearing Permit Application CPS 5211/1. Department of Water, Western Australia.
- DMP (2012) Site Inspection Report for Clearing Permit Application CPS 5211/1. Site inspection undertaken 26 September 2012. Department of Mines and Petroleum, Western Australia
- Environment Australia (2001) A Directory of Important Wetlands in Australia, Third Edition. Environment Australia, Canberra.
- 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.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Western Australian Herbarium (2012) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <<http://florabase.dec.wa.gov.au>> Accessed 19 November 2012

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.