



1. Application details

1.1. Permit application details

Permit application No.: 794/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Chevron Australia Pty Ltd - Gorgon Development Joint Venture

1.3. Property details

Property: TERRITORIAL SEA PRODUCTION LICENCE TL/3
Local Government Area: Shire of Ashburton (Islands)
Colloquial name: Barrow Island (Offshore)

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
<p>In May 2005 a geophysical survey was conducted during which the conditions of the seabed along two proposed feed gas pipeline routes offshore from North White's Beach, Barrow Island, were recorded by video camera. This footage, along with a series of photographs, was analysed by environmental consultants RPS Bowman Bishaw and Gorham to provide a description of the vegetation. The vegetation at the southern two proposed sites of clearing (southern borehole sites 1 and 2) was recorded as a macroalgal assemblage dominated by <i>Halimeda</i> spp. and <i>Sargassum</i> spp. with lesser soft coralline algae and red algae. Fissures and holes in the shallow subtidal platform supported denser macroalgal assemblages of the same species. The two northern sites of proposed clearing (northern borehole sites 1 and 2) consisted primarily of low profile rocky reef with variable coarse sand veneers, supporting a low to medium density macroalgal assemblage dominated by <i>Sargassum</i> spp. Bare <i>Sargassum</i> stipes indicate that either the survey was undertaken at a low biomass time of the year or, there had been recent burial and subsequent exposure of substrate. An understory macroalgal assemblage dominated by small brown and red macroalgae and <i>Halimeda</i> spp. occurred in areas of exposed rock (Chevron Australia 2005).</p>	<p>The proposal involves clearing of four drilling sites totalling up to 0.003 ha (30 m²), as part of an investigative geotechnical program in the intertidal and subtidal marine environment off North White's Beach on the western side of Barrow Island. These investigations are associated with the Gorgon Development, which proposes to install two feed gas pipelines to transport production fluids from the offshore gas fields to the proposed gas processing facility at Town Point on Barrow Island. The proposed investigative geotechnical drilling program will occur at ten different sites along each of the two proposed feed gas pipeline routes. However, disturbance to vegetation will only occur at the two shallow-most drilling sites on each route (Chevron Australia 2005).</p> <p>The sites of proposed clearing for drilling will occur along the proposed feed gas pipeline routes. However, the exact locations are yet to be finalised subject to further analysis of a recent geophysical survey undertaken. The locations that have been assessed are considered to be very near to the eventual sites of clearing for drilling (Chevron Australia 2005).</p>	<p>Pristine: No obvious signs of disturbance (Keighery 1994)</p>	<p>All intertidal and subtidal habitat along the two proposed feed gas pipelines were surveyed in May 2005, using video surveys and aerial photography. RPS Bowman Bishaw and Gorham analysed the results to provide a description of the vegetation (Chevron Australia 2005).</p> <p>Chevron Australia (2005) believe that the 130 or more macroalgal taxa known from marine habitats around Barrow Island are distributed widely in the tropical Indo-Pacific Region.</p>

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 proposed clearing area is located within the Barrow Island Marine Management Area (Class A), vested in the Marine Parks and Reserves Authority (CALM 2004), and the Barrow Island Marine Area listed on the Register of National Estate (DEH 2000). The Barrow Island Marine Area, as part of the Barrow/Lowenthal/Monte Bello Island groups and the sublittoral ridge on which they are situated, is important in demonstrating a major distinctive coastal type in Western Australia. Barrow Island Marine Area comprises a broad range of marine environments that provide habitat for a very diverse marine fauna, many of which have conservation significance, including four listed as threatened under Schedule 1 of the *Wildlife Conservation Act 1950*, and one listed as specially protected under Schedule 4. At least 47 species of seabirds and waders have been recorded in the Barrow Island Marine Area, including 32 species of migratory waders listed under one or both of the China Australia Migratory Bird Agreement and the Japan Australia Migratory Bird Agreement. The area also has biogeographical significance due to the presence of several marine fauna species at or close to the limits of their geographic distribution. In addition, a species of gastropod is endemic to the Barrow/Monte Bello ridge, possibly indicating that this area has been isolated from other ecosystems for some time (DEH 2000).

Barrow Island Marine Area is in very good condition. However, levels of petroleum exploration activity offshore of the island have increased in recent years (DEH 2000).

The areas of proposed clearing are located on the two proposed Gorgon Development feed gas pipeline routes off North White's Beach on the west coast of Barrow Island. The proposed pipeline routes traverse an intertidal and shallow subtidal limestone reef platform (along with a bare sandy beach with exposed beach rock bench). Off the north and west coasts of Barrow Island, the intertidal reef is narrower and more eroded than elsewhere around the island. It supports dense macroalgal beds if exposed but is often overlain by sand in the upper tidal zone. The subtidal limestone platform reef surrounding Barrow Island is usually covered with a veneer of sand or silt of varying thickness and seasonally supports a high biomass of brown macroalgae, in particular *Sargassum* spp. (Chevron Australia 2005).

The vegetation in the proposed area of clearing is predominantly macroalgae, dominated by *Sargassum* spp. and *Halimeda* spp., with some lesser soft corals (Chevron Australia 2005). *Sargassum* spp. are among the more important benthic primary producers in the region and dense *Sargassum* beds provide shelter, food and substrate for a diverse array of fauna, including invertebrates and fish (Chevron Australia 2005). However, Chevron Australia (2005) stated that these macroalgae communities are better developed in areas other than at the sites of proposed clearing, and that a low diversity of species were detected during survey of the sites of proposed clearing. Chevron Australia (2005) believe that most of the 130 macroalgal taxa known from the marine habitats around Barrow Island are distributed widely in the tropical Indo-Pacific Region, and stated that the macroalgae beds off the west coast of the Island are of low conservation significance because of their wide distribution throughout the region and their ability to recover rapidly from disturbance.

The Conservation Commission (2003) has stated that in the long term, an inevitable series of cumulative impacts of proposed developments associated with the Gorgon Development will substantially diminish the biodiversity conservation values of Barrow Island Nature Reserve and the marine ecosystems offshore. However, little clearing has currently occurred in the waters off Barrow Island and both CALM (2005) and the EPA (2005) have advised that the application to clear up to 0.003ha (30 m²) for near shore investigative geotechnical drilling could be considered as minor and preliminary in the context of the Gorgon Development proposal as a whole. CALM is familiar with this form of operation on Barrow Island and is of the view that such programs can be appropriately managed and made to be environmentally acceptable through established Petroleum Act processes (CALM 2005).

The proposed area of clearing is very small and the nearshore marine habitats of the Barrow/Lowenthal/Monte Bello Island groups are currently largely intact. In addition, macroalgal beds naturally undergo large seasonal biomass fluctuations each year and have the ability to recover rapidly from disturbance. Therefore, it is unlikely that the proposed clearing area is of higher biodiversity significance than other marine vegetation in the Barrow Island Marine Area.

Methodology

CALM 2004
DEH 2000
Chevron Australia 2005
Conservation Commission 2003
CALM 2005

(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

Barrow Island Marine Area comprises a broad range of marine environments that provide habitat for a very diverse marine fauna. This fauna includes: ten species of mammal, among them the Dugong *Dugong dugon*,

the False Killer Whale *Pseudorca crassidens*, and the Bottle-nose Dolphin *Tursiops truncatus*; at least four species of turtle, the Green Turtle *Chelonia mydas*, the Flatback Turtle *Natator depressus*, the Hawksbill Turtle *Eretmochelys imbricata*, and the Loggerhead Turtle *Caretta caretta*; three species of sea snakes, *Aipysurus duboisii*, *Aipysurus laevis laevis*, and *Emydocephalus annulatus*; and diverse communities of fish and invertebrates (DEH 2000).

The four species of turtle are all listed as threatened (Vulnerable) under Schedule 1 (Fauna that is rare or is likely to become extinct) of the *Wildlife Conservation Act 1950*. The Green Turtle, Flatback Turtle, and Hawksbill Turtle all breed on Barrow Island. The Barrow Island Green Turtle rookery is the second largest in Western Australia and the Flatback Turtle Rookery is one of the largest (Conservation Commission 2003). The Dugong is also listed under the Act in Schedule 4 (Other specially protected fauna).

The gastropod *Amoria macandrewi* is endemic to the Barrow/Monte Bello ridge, and several marine fauna species are at or close to the limits of their geographic distribution in the Barrow Island Marine Area. These include a number of echinoderm species, the mollusc *Thais orbita*, and the Fairy Tern *Sterna nereis*. The area is also the type locality for a species of heart urchin, *Rhynobrissus tumulus* (DEH 2000).

The invertebrate fauna of the Barrow Island Marine Area, although little investigated, is highly diverse. Limited surveys on limestone platforms have so far recorded 87 species of gastropods (in 32 families), 12 families of bivalves, 15 families of polychaetes, and many species of sponges (poriferans), sea anemones (actinarians), seapens (pennatulaceans), crabs, pericard crustaceans, brachiopods and ostracods (DEH 2000). The echinoderm fauna includes at least 103 species and comprises a mixture of Indo-West Pacific coral reef species and north-west Australian inshore species. The coral fauna is also diverse with 24 species, representing 15 genera, recorded from Turtle Bay alone (DEH 2000).

The vegetation in the proposed area of clearing is predominantly macroalgae, dominated by *Sargassum* spp. and *Halimeda* spp., with some lesser soft corals. *Sargassum* spp. are among the more important benthic primary producers in the region and dense *Sargassum* beds provide shelter, food and substrate for a diverse array of fauna, including invertebrates and fish (Chevron Australia 2005). However, Chevron Australia (2005) stated that macroalgae communities are better developed in other parts of the Barrow Island Marine Area, than at the sites of proposed clearing. For example, further offshore from North White's Beach and the proposed clearing area, the high profile reef supports foliose macroalgae. Subtidal boulders and reef to the south of North White's Beach also support better developed macroalgal assemblages, on which turtles have been observed browsing (Chevron Australia 2005). Chevron Australia (2005) stated that the invertebrate assemblages recorded in areas of proposed developments around Barrow Island are associated with habitats that are widely distributed in adjacent areas of the coast and regionally, and consider that none of these assemblages are of high conservation significance.

The proposed area of clearing is very small at up to 0.003 ha (30 m²) and the nearshore marine habitats of the Barrow/Lowenthal/Monte Bello Island groups are currently largely intact. In addition, macroalgal beds naturally undergo large seasonal biomass fluctuations each year and have the ability to recover rapidly from disturbance. Therefore, it is unlikely that the proposed clearing area is necessary for the maintenance of a significant habitat for indigenous fauna.

Methodology DEH 2000
Wildlife Conservation Act 1950
Conservation Commission 2003
Chevron Australia 2005

(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**

The DoE GIS System indicates that there are no known threatened or priority flora in the intertidal and subtidal marine habitats surrounding Barrow Island. Chevron Australia (2005) states that no declared rare or threatened flora occurs within the areas of proposed clearing.

Methodology GIS System: Declared rare and priority flora list - CALM 01/07/05
Chevron Australia 2005

(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**

No known threatened ecological communities were identified in surveys or are known to exist in or near the proposed clearing area (Chevron Australia 2005). The DoE GIS system indicates that there are no known threatened ecological communities on Barrow Island or in nearshore and offshore marine areas around the island.

Methodology Chevron Australia 2005
GIS Layer: Threatened Ecological Communities - CALM 12/04/05

(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 likely to be at variance to this Principle

No available references are known for estimating the existing and pre-European extent of macroalgal assemblages in marine habitats. Chevron Australia (2005) believe that most of the 130 macroalgal taxa known from the marine habitats around Barrow Island are distributed widely in the tropical Indo-Pacific Region. While some clearing of marine habitat has occurred in the region, little clearing has been conducted in the intertidal and subtidal areas around Barrow Island to date. Therefore, it is considered highly likely that well over 30% of the pre-European extent of this vegetation type remains intact at present.

Methodology Chevron Australia 2005

(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

The *Environmental Protection Act 1986* defines a wetland as an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary. As the proposed clearing area occurs in marine rather than terrestrial habitat, this clearing principle is not considered applicable.

Methodology Environmental Protection Act 1986

(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

Each year the macroalgal beds off the west coast of Barrow Island undergo large seasonal biomass fluctuations, and macroalgae recover rapidly from disturbance. As the proposed clearing is for the disturbance of less than 0.003 ha (30 m²) of sea bed, it is not likely to cause appreciable land degradation.

Methodology

(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 proposed clearing area is located within the Barrow Island Marine Management Area (Class A), vested in the Marine Parks and Reserves Authority and principally managed by CALM. The marine management area is recognised for both commercial and conservation values and is zoned as multiple-use (CALM 2004). The proposed clearing area also lies within the Barrow Island Marine Area listed on the Register of National Estate (DEH 2000). Barrow Island Marine Park (Class A), vested in the Marine Parks and Reserves Authority and managed by CALM, occurs within 10 km to the south-west of the proposed clearing area and is a Sanctuary Zone (CALM 2004). Barrow Island Nature Reserve (Class A), vested in the Conservation Commission and managed by CALM for the purpose of conservation of flora and fauna, is situated less than 1 km to the south-east of the area of proposed clearing.

CALM (2005) has reviewed the clearing permit application and provided the following comments. The nearshore proposed investigative geotechnical drilling associated with this clearing application could be judged to be minor and preliminary in the context of the whole Gorgon Development proposal. CALM is familiar with this form of operation on Barrow Island and is of the view that such programs can be appropriately managed and made to be environmentally acceptable through established Petroleum Act processes. CALM has previously provided similar advice for geotechnical applications through the former Notice of Intent to Clear process administered under the *Soil and Land Conservation Act 1945*.

In a letter to the applicant, the EPA stated that the proposed investigative works associated with this clearing application are subject to the regulatory control of DoIR and CALM and that a detailed, program-specific Environmental Management Plan will be submitted for their evaluation. These mechanisms will be capable of ensuring an appropriate level of environmental management is applied and that the work will not have a significant environmental impact (EPA 2005).

Methodology CALM 2004
GIS Layer: CALM Managed Lands and Waters - CALM 1/07/05
GIS Layer: Environmentally Sensitive Areas - DoE 30/5/05
DEH 2000
CALM 2005

(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 at variance to this Principle

The area under application is located on the sea bed in a marine habitat and is therefore, naturally inundated. The vegetation in the proposed clearing areas comprises macroalgal beds which naturally undergo large seasonal biomass fluctuations. Furthermore, given the very small area under application (0.003 ha or 30m²), the clearing is not likely to cause deterioration in the quality of surface or underground water.

Methodology

(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 at variance to this Principle

As the proposed clearing area occurs in a naturally flooded marine habitat rather than terrestrial habitat, this clearing principle is not considered applicable.

Methodology

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

Comments

The proposed clearing is for geotechnical investigations that are related to the Gorgon Development proposal currently being assessed by the EPA. The applicant has provided a letter from the EPA (dated 21 September 2005) stating that the EPA considers that the proposed work outlined in this application is minor or preliminary and that it consents to this work being undertaken according to the provisions of section 41A(3) of the *Environmental Protection Act 1986*.

The Gorgon Development has a current operating licence (4467) granted in accordance with the *Environmental Protection Act 1986*. The license area encompasses the area of proposed clearing. The proposed clearing is not at variance to this licence, and no amendment to the licence will be required. A Works Approval is not required for the proposed geotechnical investigation. The Rights in Water and Irrigation Act does not have any jurisdiction in offshore water use and a Water Allocation is not required for the geotechnical investigation (DoE 2005).

There are no native title claims over the area under application.

Methodology EPA 2005
DoE 2005
GIS Layer: Native Title Claims - DLI 7/11/05

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Petroleum Production	Mechanical Removal	0.003	Grant	The assessable criteria have been addressed and the assessing officer recommends that the permit should be granted

5. References

CALM (2004) More marine parks for Western Australia. News Release, Department of Conservation and Land Management. Perth, Western Australia.

CALM (2005) Land clearing proposal advice. Advice to Program Manager, Native Vegetation Assessment Branch, Department of Industry and Resources. Department of Conservation and Land Management. Perth, Western Australia.

Chevron Australia (2005) Application to clear native vegetation: Shore crossing coring program supporting information. Report to the Native Vegetation Assessment Branch, Department of Industry and Resources. Perth, Western Australia.

Conservation Commission (2003) Biodiversity values on Barrow Island Nature Reserve and the Gorgon Gas Development. Advice to the Government from the Conservation Commission of Western Australia. Perth, Western Australia.

DEH (2000) Barrow Island Marine Area, Barrow Island, WA. Australian Heritage Database. Department of Environment and Heritage, Canberra, Australian Capital Territory.

DoE (2005) Water Allocation/License Advice. Department of Environment, Western Australia.

EPA (2005) Land clearing proposal advice. Advice to Chevron Australia regarding EPA consent to Gorgon Development investigative works. Environmental Protection Authority. Perth, Western Australia.

6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAWA	Department of Agriculture, Western Australia.
DA	Department of Agriculture, Western Australia.
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.
DoE	Department of Environment, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity 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.