



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4976/5
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Millennium Minerals Limited

1.3. Property details

Property: Mining Leases: 46/3, 46/47, 46/98, 46/129, 46/146, 46/163, 46/164, 46/166, 46/186, 46/192, 46/198, 46/199, 46/200, 46/225, 46/261, 46/262, 46/265, 46/266, 46/272, 46/273, 46/274, 46/277, 46/282, 46/302, 46/431, 46/433, 46/436, 46/441, 46/442, 46/444, 46/446, 46/447;
Miscellaneous Licences: 46/88, 46/89, 46/90, 46/91, 46/92, 46/98, 46/105.

Local Government Area: Shire of East Pilbara
Colloquial name: Nullagine Gold Project

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
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| 774.73 | | Mechanical Removal | Mineral Production and Associated Activities |

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 5 January 2017

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been broadly mapped as Beard vegetation association 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* and *A. trachycarpa* over hard spinifex, *Triodia wiseana*; Very poor rocky country on gneiss (GIS Database).

Extensive flora and vegetation surveys of the broader Nullagine Gold Project area were undertaken by Mattiske Consulting Pty Ltd (Mattiske) in July 2005, April 2006, May 2010 and April 2011 (Mattiske, 2012) and Plantecology Consulting (Plantecology) (2016).

A Level 1 Flora And Vegetation Survey of the application area was undertaken by Plantecology Consulting (2016) (Plantecology) during the period 12 April to 9 June 2016. The vegetation survey identified the following 19 vegetation types in the application area:

1. **AEBG**: Alluvial plain eucalypt buffel grass woodland, *Cenchrus ciliaris*,
2. **AHSG**: Alluvial plain hard spinifex grassland, *Triodia longiceps* - *Acacia stellaticeps*,
3. **ASSG**: Alluvial plain soft spinifex grassland, *Eragrostis eriopoda*,
4. **ASSG**: Alluvial plain soft spinifex grassland, *Triodia schinzii*,
5. **DAHW**: Drainage acacia hummock grass shrubland/ woodland, *Acacia fecunda*,
6. **DAHW**: Drainage acacia hummock grass shrubland/ woodland, *Acacia paraneura*,
7. **DAHW**: Drainage acacia hummock grass shrubland/ woodland, *Acacia tumida*,
8. **DAHW**: Drainage acacia hummock grass shrubland/ woodland, *Triodia epactia* - *Acacia trachycarpa*,
9. **DAHW**: Drainage acacia hummock grass shrubland/ woodland, *Triodia longiceps* - *Acacia trachycarpa*,
10. **DESG**: Drainage spinifex grassland with Eucalypt overstorey, *Eucalyptus rowleyi*,
11. **DESG**: Drainage spinifex grassland with Eucalypt overstorey, *Eucalyptus rowleyi* - *Acacia tumida*,
12. **DESG**: Drainage spinifex grassland with Eucalypt overstorey, *Eucalyptus victrix*,
13. **DESG**: Drainage spinifex grassland with Eucalypt overstorey, *Triodia longiceps* - *Corymbia candida*,
14. **DESG**: Drainage spinifex grassland with Eucalypt overstorey, *Triodia longiceps* - *Eucalyptus leucophloia*,
15. **HSPG**: Hill spinifex grassland, *Triodia wiseana*,
16. **PHSG**: Plain hard spinifex grassland, *Triodia brizoides*,
17. **PHSG**: Plain hard spinifex grassland, *Triodia brizoides* - *Triodia longiceps*
18. **SSCG**: Stony plain spinifex grassland with chenopods, *Triodia longiceps* - *Sclerolaena hostilis*,
19. **SSCG**: Stony plain spinifex grassland with chenopods, *Triodia longiceps* - *Acacia arrecta*,

In addition, some areas were described as:

Bare: Creekbed,
Bare: Cleared.

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| Clearing Description | Nullagine Gold Project. Millennium Minerals Limited proposes to clear up to 774.73 hectares of native vegetation within a total boundary of approximately 1,218.86 hectares, for the purpose of extending several open pit gold mines and mining related infrastructure. The project is located approximately seven kilometres east of Nullagine, in the Shire of East Pilbara. |
| 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 | Clearing permit CPS 4976/1 was granted by the Department of Mines and Petroleum (DMP) on 12 July 2012, and was valid from 4 August 2012 to 28 February 2021. Amended permit CPS 4976/2 was granted on 15 January 2015, increasing the area approved to clear from 190 hectares to 294 hectares and increasing the permit boundary from approximately 534 hectares to approximately 591 hectares. Amended permit CPS 4976/3 was granted on 21 May 2015, increasing the area approved to clear from 294 hectares to 387.8 hectares, and increasing the permit boundary from approximately 591 hectares to approximately 702 hectares. On 21 September 2015, the Permit Holder applied to amend CPS 4976/3 to increase the amount of clearing authorised from 387.8 hectares to 489.03 hectares, to increase the permit boundary from approximately 703 hectares to approximately 804 hectares and to add Mining Lease 46/436 to the permit. The additional clearing was required for the construction of a new tailings storage facility and two new access roads. CPS 4976/4 was granted on 16 June 2016. An application to amend CPS 4976/4 was submitted to the DMP on 29 July 2016. The applicant requested an increase in the amount of clearing authorised, an increase in the clearing permit boundary and clearing on Mining Lease 46/192. The total clearing required for CPS 4976/5 is 774.73 hectares. |

3. Assessment of application against clearing principles

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| Comments | <p>Millennium Minerals Limited has applied to increase the amount of clearing authorised from 489.03 to 774.73 hectares, to increase the clearing permit boundary and to clear native vegetation on Mining Lease 46/192. The proposed clearing of native vegetation is required for the purpose of extending the existing gold mining operations at the Nullagine Gold Project. The new mining areas include satellite deposits at the Five Mile Creek area (comprising Anna de Vidia, Otways extension and Gambols deposits), All Nations Extension area (comprising All Nations Extension, All Nations Extension East), Little Wonder Extension, two additional areas located near the Tailings Storage Facility 2 (TSF2) and access roads.</p> <p>The proposed amendment to the previously approved clearing footprint will impact on all 19 vegetation types identified by Plantecology Consulting (2016). The majority of the flora survey area (591.3 hectares) is located within vegetation type 18 (SSCG: Stony plain spinifex grassland with chenopods, <i>Triodia longiceps</i> - <i>Sclerolaena hostilis</i>) (Plantecology, 2016). Stony plain spinifex grassland with chenopods vegetation is not restricted to the application area and large areas of the stony plain vegetation type are located in the Mosquito Land System (approximately 27,600 hectares in size) and in the River Land System (approximately 40,880 hectares in size). The majority of vegetation type 18 is located in the Five Mile Creek area. Approximately 150 hectares of vegetation type 18 is proposed to be cleared in the Five Mile Creek amended clearing area.</p> <p>No Threatened Flora species are located in the clearing permit amendment area. However, five Priority Flora species occur in the amendment area including <i>Acacia aphanoclada</i> (Priority 1), <i>Acacia fecunda</i> (Priority 3), <i>Eucalyptus rowleyi</i> (Priority 3) <i>Goodenia nuda</i> (Priority 4) and <i>Ptilotus mollis</i> (Priority 4) (Plantecology, 2016). <i>A. aphanoclada</i> (Priority 1) occurred in 35% of the 146 survey quadrats and approximately 3,395 individuals were recorded in the flora survey area (Plantecology, 2016). Plantecology (2016) also recorded an additional 3,630 individuals of <i>A. aphanoclada</i> outside of the survey area. The flora survey also reported 56 records of <i>A. aphanoclada</i> within the Mosquito Land System (Plantecology, 2016). The report confirms <i>A. aphanoclada</i> is common, abundant and widespread on hills and occasionally flats in the Mosquito Land System (Plantecology, 2016; Woodgis, 2016). Although, flora surveys have confirmed <i>A. aphanoclada</i> is widespread in the Mosquito Land System a flora condition exists in relation to this species on CPS 4976/4.</p> <p><i>A. fecunda</i> and <i>E. rowleyi</i> are common, widespread and locally abundant in the Mosquito Land System (Plantecology, 2016). These two Priority species form large monocultures of between hundreds and thousands of metres long on drainage lines making it difficult to record individual plants (Woodgis, 2016). For this reason, the presence of <i>A. fecunda</i> and <i>E. rowleyi</i> are recorded in hectares and occur over 54.11 hectares and 23.77 hectares respectively (Plantecology, 2016). A further flora survey was undertaken by Woodgis (2016) in September 2016 which recorded individuals of <i>A. fecunda</i> and <i>E. rowleyi</i> in surrounding areas outside of the amended clearing area. <i>A. fecunda</i> was recorded at 19 locations and <i>E. rowleyi</i> was recorded at 29 locations within and surrounding the Mosquito Land System (Plantecology, 2016).</p> <p><i>G. nuda</i> (Priority 4) is widespread and locally abundant and this species is mostly recorded from seasonally inundated clay soils, drainage lines from sand in scoured river beds and hillsides (Plantecology, 2016). During the flora survey, 76 individuals of <i>G. nuda</i> were recorded in the survey area. However, not all individuals will be cleared within the amended clearing area (Plantecology, 2016). Given there are 103 records of <i>G. nuda</i> in the</p> |
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surrounding area it is unlikely that the proposed amendment will have a detrimental impact on the species (Plantecology, 2016).

P. mollis (Priority 4) is also widespread and abundant on rocky slopes (Plantecology, 2016). The flora survey recorded 152 individuals of *P. mollis* within the All Nations amendment area. However, not all individuals of *P. mollis* will be cleared within the amended clearing area (Plantecology, 2016). Given there are 37 records of *P. mollis* in the surrounding area it is unlikely that the proposed amendment will have a detrimental impact on the species (Plantecology, 2016).

No Threatened Ecological Communities (TEC's) were recorded in the amended clearing area. However, the Priority Ecological Community (PEC), Stony Saline Plains of the Mosquito Land System (Priority 3) occurs in the amended clearing area (Plantecology, 2016). The PEC is described as a saltbush community of the duplex plains, Mosquito Creek series (Nullagine) (DPaW, 2016). The PEC covers a large area of the Mosquito Land System (approximately 46,000 hectares or 25% of the land system).

The PEC is represented by stony plain spinifex grassland with chenopods and is described by Van Vreeswyck *et al* (2004) as patchy hummock grasslands of *Triodia longiceps* with isolated to scattered shrubs; *Acacia*, *Senna* and *Maireana* spp (Plantecology, 2016). Approximately 1,086 hectares of the Stony Saline Plains PEC was mapped during the flora survey (Plantecology, 2016). The definition and extent of the PEC is poorly understood. For this reason, the applicant has also undertaken further and ongoing surveys of the vegetation types, soils and landforms associated with this PEC. This information and data analysis will further define the species assemblages, the distribution of the ecological community and inform of potential or actual impacts associated with mining activities (Plantecology, 2016; Woodgis, 2016).

The Department of Parks and Wildlife (DPaW) provided advice on the PEC and noted that the vegetation survey information has not been interpreted to enable an assessment of the occurrence of the PEC (DPaW, 2016a). At the completion of the flora and vegetation/PEC survey, the data gathered on flora, vegetation and landform will enable the PEC to be better defined in terms of site type and the assignment of vegetation sub-associations, total area, distribution and status of priority flora within the community (DPaW, 2016a). DPaW also advised that at the conclusion of the survey it is likely a revision of the PEC description will result and this will assist mapping of the PEC at a finer scale.

As the flora survey is ongoing, flora data including total flora taxa found within quadrats aligning to the site type or vegetation condition within quadrats has not been finalised. Therefore the total area of impact to the vegetation most likely to align with the PEC under this current clearing amendment is not defined. However, a small portion of the amended clearing area which contains Stony plain spinifex grassland with chenopods is required for the haul road (Plantecology, 2016). Given the PEC is extensive within the Mosquito Land System and is well represented outside of the amended clearing area it is unlikely that clearing activities will have a significant impact on the PEC.

Several fauna surveys have been undertaken over Millenium Minerals tenements since 2006. The most recent fauna survey of the amended clearing area undertaken by Bamford Consulting Ecologists (BCE) (2016) during 20 to 24 June 2016 recorded 51 bird, 4 reptile, 4 mammals and 4 introduced species (BCE, 2016). Two conservation significant fauna species were recorded in the amended clearing area (BCE, 2016). These species included:

- Rainbow Bee-eater (*Merops ornatus* - Migratory),
- Brush-tailed Mulgara (*Dasyercus blythi* - Priority 4).

BCE (2016) reported the fauna species observed were mostly common, widespread and not of conservation significance. The Rainbow Bee-eater is a migratory bird species which has a broad distribution throughout Australia. The proposed clearing is unlikely to have any impact on the conservation status of this species.

Evidence of the presence of Brush-tailed Mulgara were recorded by the presence of burrows, diggings and tracks in the Five Mile Creek area (Anne de Vidia). The distribution of Brush-tailed Mulgara is widespread in arid, northern and central regions of Western Australia. This species was present in almost all sandy to sandy-loam soil areas surveyed (BCE, 2016). Brush-tailed Mulgara occur in nearby areas, including north of Skulls Spring Road (BCE, 2016). The fauna survey reported that a small number of Brush-tailed Mulgara may be impacted by the clearing proposal (BCE, 2016). DPaW provided advice on the potential impact on Brush-tailed Mulgara and recommended a fauna relocation program be required and advised clearing should not occur during the breeding season (June to September) where young may nest in burrows (DPaW, 2016b). Given that BCE (2016) recorded Brush-tailed Mulgara at other locations outside the Five Mile Creek area and suitable sandy to sandy-loam habitat exists in surrounding areas, it is unlikely that the proposed clearing will have a detrimental impact on the species.

Based on previous observations, the Nullagine Gold Project area is considered important for the Greater Bilby (*Macrostis lagotis* - Vulnerable). The Greater Bilby has a scattered, disjunct distribution across the Chichester, Fortescue and Hamersley IBRA sub-regions of the Pilbara. BCE (2016) surveyed the locations of the amended clearing area and areas of previous Greater Bilby activity. Extensive searching in areas mapped as suitable habitat for Greater Bilbys were also surveyed (BCE, 2016). The nearest evidence of foraging excavations by Greater Bilby individuals was recorded approximately two kilometres from the amended clearing area (south of the Nullagine Aerodrome) (BCE, 2016; Millenium Minerals Ltd, 2016a). No evidence of Greater Bilby presence

or burrows were recorded during the fauna surveys in the amended clearing area (BCE, 2016). Some area of sandy-loam habitat which is suitable for Greater Bilby individuals is recorded in the amended clearing area. However, the proposed clearing is unlikely to have an impact on the conservation status of this species.

There are two watercourses and one small waterbody within the amendment area (GIS Database). One of these watercourses is associated with Five Mile Creek and another is a minor tributary associated with Five Mile Creek (GIS Database). Five Mile Creek is a medium sized, ephemeral watercourse which extends over a broad area, north and south of the existing clearing permit area. The clearing within these two watercourse areas is required for a haul road. A small, ephemeral waterbody is located in the eastern part of the amendment area (All Nations area) (GIS Database). This waterbody is associated with a minor, ephemeral watercourse located to the north of the amendment area (GIS Database).

It is unlikely that clearing required for the proposal will have a detrimental impact on these watercourses or the waterbody due to the small amount of clearing required in these areas when compared to the overall clearing footprint. Larger areas of similar, intact wetland dependant vegetation are located in drainage lines in the surrounding area (GIS Database). As wetland dependant vegetation will be cleared, the clearing is considered to be at variance to Principle (f) (Plantecology Consulting, 2016). The clearing is not likely to significantly impact the ecological functions of watercourses in the surrounding area. Native vegetation clearing will not have a detrimental impact on vegetation types located in the area.

The south-western end of the original permit area and a portion of the amendment area falls within a Public Drinking Water Source Area (Priority 3), the Nullagine Water Reserve (GIS Database). These two amendment areas associated with the extension of the TSF2 area are located within the Water Reserve (GIS Database). To ensure the protection of water resources, the Department of Water (DoW) advised all activities within the water reserve should be conducted in accordance with DoW Water Quality Protection Notes and Guidelines (DoW, 2016). The DoW also advised that all clearing activities associated with the proposal including infrastructure, laydown areas, refuelling and topsoil storage should be compatible with the DoW's Land Use Compatibility Tables. Mining activities should also be managed using current best practice (DoW, 2016). Groundwater abstraction in this area is also subject to licencing by the DoW.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains mostly consistent with the assessment contained in decision reports CPS 4976/1, 4976/2, 4976/3 and 4976/4. As wetland dependant vegetation will be cleared, the clearing is considered to be at variance to Principle (f).

Methodology BCE (2016)
DPaW (2016a)
DPaW (2016b)
DoW (2016)
Government of Western Australia (2015)
Keighery (1994)
Mattiske (2012)
Millennium Minerals Limited (2016a)
Millennium Minerals Limited (2016b)
Plantecology (2016)
Van Vreeswyk *et al.* (2004)
Woodgis (2016)

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

Comments There are two native title claims over the application area (WC1999/008 and WC1999/016) (DAA, 2016). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. However, the mining tenements have 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 (DAA, 2016). One registered Aboriginal Site of Significance (site 704) occurs within close proximity to the area proposed for the construction of the TSF2 (DAA, 2016). 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.

The Golden Eagle Satellite Deposits Development (which included parts of the area covered by CPS 4976/1) was assessed by the former Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) (now the Department of the Environment and Energy (DotEE)) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The project was determined to be a controlled action under the EPBC Act for the protection of listed threatened species and communities. The development was approved on 17 January 2012 subject to conditions (EPBC 2011/5855). The conditions of the EPBC Act approval included limiting the disturbance area for the project to 294 hectares (DotEE, 2012). Although the

amended clearing permit area is greater than 294 hectares, the majority of the clearing permit footprint falls outside of the EPBC Act approval area where this restricted clearing limit applies. Millennium Minerals Limited has advised that the clearing limit imposed by the EPBC Act approval has not been exceeded (Millennium Minerals Limited, 2016b).

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Parks and Wildlife 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 amendment application was advertised on 22 August 2016 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received which did not object to this application.

Methodology DAA (2016)
DotEE (2012)
Millennium Minerals Limited (2016b)

4. References

- BCE (2016) Millennium Minerals Nullagine Gold Project, Inspection of New Project Areas for Fauna Values April to June 2016. Report prepared for Millennium Minerals Ltd, by Bamford Consulting Ecologists, November 2016.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 25 August 2016).
- DPaW (2016a) PEC Advice received in relation to Clearing Permit Application CPS 4976/5. Species and Communities Branch, Department of Parks and Wildlife, Western Australia, October 2016.
- DPaW (2016b) Fauna Advice received in relation to Clearing Permit Application CPS 4976/5. Species and Communities Branch, Department of Parks and Wildlife, November 2016.
- DotEE (2012) Golden Eagle Satellite Deposits Development, Pilbara, WA (EPBC 2011/5855). Department of the Environment and Energy, 17 January 2012.
- DoW (2016) Advice from the Department of Water in relation to Clearing Permit Application CPS 4976/5. Department of Water, Western Australia, August 2016.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, 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 (2012) Flora and Vegetation of the Nullagine Project Areas. Report Prepared by Mattiske Consulting Pty Ltd for Millennium Minerals Limited, April 2012.
- Millennium Minerals (2016a) Additional information received in relation to Clearing Permit Application CPS 4976/5. Millennium Minerals Ltd, Western Australia, 2 December 2016.
- Millennium Minerals (2016b) Additional information received in relation to Clearing Permit Application CPS 4976/5. Millennium Minerals Ltd, Western Australia, 7 November 2016.
- Plantecology (2016) Millennium Minerals Ltd, Nullagine Gold Project Flora and Vegetation Survey for CPS 4976/5 - 22/08/2016. Report prepared for Millennium Minerals Ltd by Plantecology Consulting, August 2016.
- Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia. Department of Agriculture, Western Australia.
- Woodgis (2016) Survey of Priority Flora and Ecological Communities Update. Additional Information received in relation to CPS 4976/5. Woodgis Environmental Assessment and Management, September, 2016.

5. Glossary

Acronyms:

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| BoM | Bureau of Meteorology, Australian Government |
| DAA | Department of Aboriginal Affairs, Western Australia |
| DAFWA | Department of Agriculture and Food, Western Australia |
| DEC | Department of Environment and Conservation, Western Australia (now DPaW and DER) |
| DER | Department of Environment Regulation, Western Australia |
| DMP | Department of Mines and Petroleum, Western Australia |
| DRF | Declared Rare Flora |
| DotEE | Department of the Environment and Energy, Australian Government |
| DoW | Department of Water, Western Australia |
| DPaW | Department of Parks and Wildlife, Western Australia |
| DSEWPaC | Department of Sustainability, Environment, Water, Population and Communities (now DotE) |
| EPA | Environmental Protection Authority, Western Australia |
| EP Act | <i>Environmental Protection Act 1986</i> , Western Australia |
| EPBC Act | <i>Environment Protection and Biodiversity Conservation Act 1999</i> (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 |

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| PEC | World Conservation Union |
| RIWI Act | Priority Ecological Community, Western Australia |
| TEC | <i>Rights in Water and Irrigation Act 1914</i> , Western Australia |
| | Threatened Ecological Community |

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia):-

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| T | <p>Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).</p> <p>Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.</p> <p>Threatened flora is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act.</p> <p>The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.</p> |
| CR | <p>Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p> |
| EN | <p>Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p> |
| VU | <p>Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p> |
| EX | <p>Presumed extinct species Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.</p> |
| IA | <p>Migratory birds protected under an international agreement Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p> |
| CD | <p>Conservation dependent fauna Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p> |
| OS | <p>Other specially protected fauna Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p> |
| P | <p>Priority species Species which are poorly known; or Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.</p> |
| P1 | <p>Priority One - Poorly-known species: Species that are known from one or a few locations (generally five or less) which are potentially at risk.</p> |

All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 Priority Two - Poorly-known species:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare 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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.