



# Clearing Permit Decision Report

## 1. Application details and outcomes

### 1.1. Permit application details

Permit number:	4861/4
Permit type:	Purpose Permit
Applicant name:	Atlas Iron Limited
Application received:	15 June 2023
Application area:	219 hectares
Purpose of clearing:	Mineral Production
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 47/1449 Miscellaneous Licence 45/248
Location (LGA area/s):	Town of Port Hedland
Colloquial name:	Mt Dove DSO Project

### 1.2. Description of clearing activities

Atlas Iron Limited proposes to clear up to 219 hectares of native vegetation within a boundary of approximately 219 hectares, for the purpose of mining related infrastructure (Atlas Iron, 2023). The project is located approximately 60 kilometres south of Port Hedland, within the Town of Port Hedland (GIS Database).

The application is to allow for the extension of duration to 31 December 2028.

Clearing permit CPS 4861/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 17 May 2012 and was valid from 9 June 2012 to 31 May 2017. The permit authorised the clearing of up to 219 hectares of native vegetation within a boundary of approximately 219 hectares, for the purpose of mineral production.

CPS 4861/2 was granted on 18 May 2017, amending the permit to extend the permit duration to 31 December 2018. The area of clearing authorised and the permit boundaries remained unchanged.

CPS 4861/3 was granted on 1 November 2018, amending the permit to extend the permit duration to 31 December 2023. The area of clearing authorised and the permit boundaries remained unchanged.

On 28 June 2023, the Permit Holder applied to amend CPS 4861/3 to extend the permit duration to 31 December 2028. The area of clearing authorised and the permit boundaries remained unchanged. As of 31 May 2021, 123.595 hectares of native vegetation has been cleared within the approved permit boundary. Approximately 95.4 hectares of native vegetation remains to be cleared.

### 1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	27 July 2023
Decision area:	219 hectares of native vegetation

### 1.4. Reasons for decision

This clearing permit application was made in accordance with section 51KA(1) of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 15 June 2023. DMIRS advertised the application for a public comment for a period of 7 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics, relevant datasets, supporting information provided by the applicant including the results of a flora and vegetation survey and fauna survey, the clearing principles set out in Schedule 5 of the EP Act, and any other matters considered relevant to the assessment. The assessment identified that the proposed clearing will have negligible impact on habitat for flora, fauna and ecological communities, or conservation areas.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures, the Delegated Officer determined that the proposed clearing is not likely to lead to an unacceptable risk to the environment. The Delegated Officer decided to grant a clearing permit with avoid/minimise, directional clearing and weed management conditions.

The assessment has not changed since the assessment for CPS 4861/3. The Delegated Officer determined that the proposed extension of duration is not likely to lead to an unacceptable risk to environmental values.

### 1.5. Site map

A site map of proposed clearing is provided in Figure 1 below.

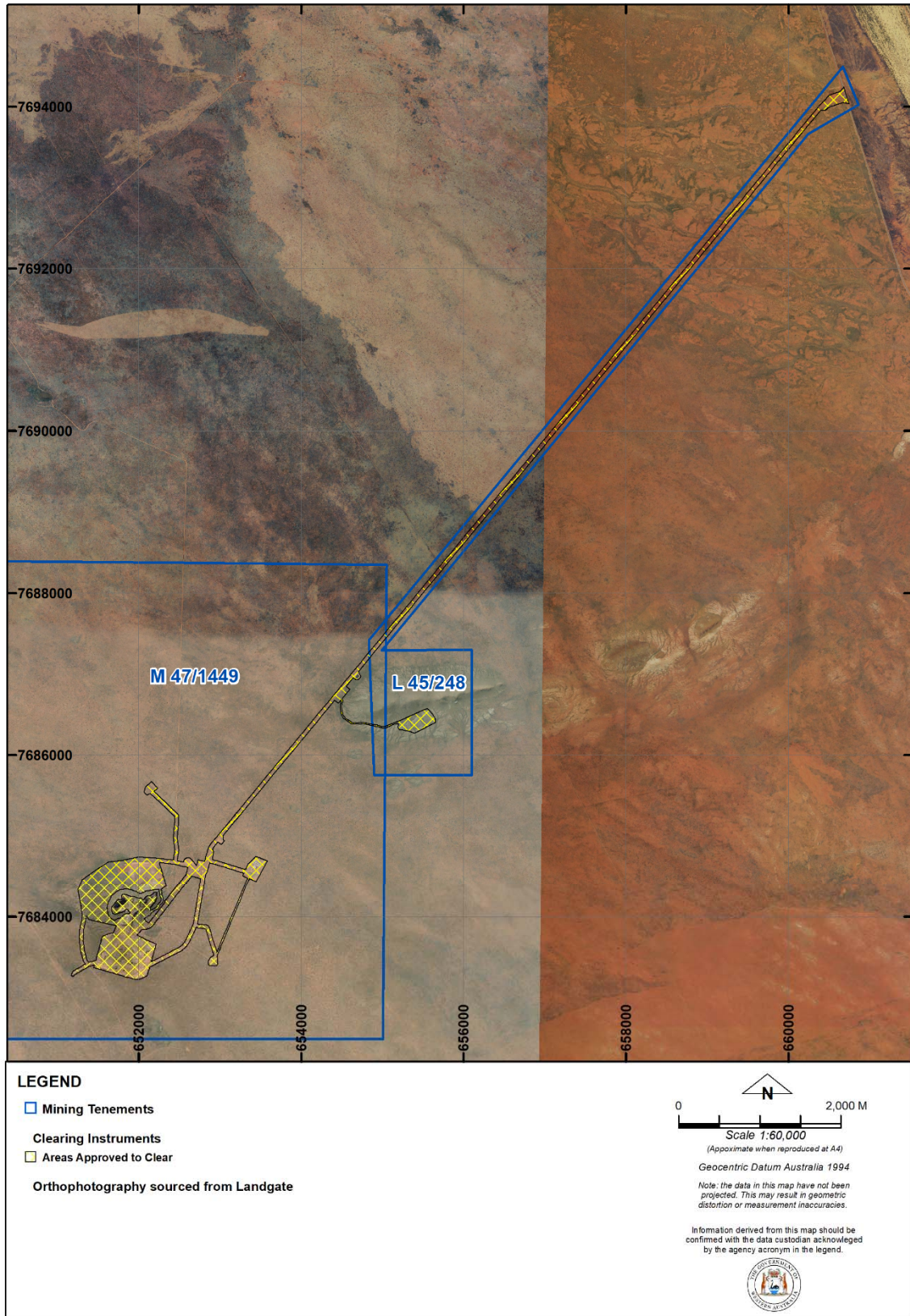


Figure 1. Map of the application area. The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

## 2. Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant, demonstrating that avoidance and mitigation measures such as, but not limited to, those listed below will be undertaken:

- clearing will be planned so that the area of land required for immediate use is cleared and exposed;
- land clearing will be audited annually;
- vegetation clearing will be undertaken in accordance with Atlas's Ground Disturbance and Topsoil Management Standard Operating Procedure;
- no known populations of priority flora will be cleared;
- vehicles will be prohibited from driving off the access tracks;
- preparation and implementation of a Significant Species Management Plan; and
- a 20 metre buffer around the significant cave (MD-AN-02) will be clearly demarcated (Coffey Environments, 2012).

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

### 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values. A review of current environmental information reveals that the assessment against the clearing principles has not changed from the Clearing Permit Decision Report CPS 4861/3.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principles (a) and (b), is not likely to be at variance to Principles (c), (d), (f), (g), (h), (i) and (j) and is not at variance to Principle (e).

#### 3.2.1. Biological values (flora and fauna) - Clearing Principles (a) and (b)

##### Assessment

A Level 2 flora and vegetation survey was undertaken over the Mt Dove area, including the application area, in June 2010 by botanists from Woodman Environmental Consulting Pty Ltd (Woodman). A total of 88 discrete native vascular plant taxa were recorded within the Mt Dove survey area (Woodman, 2011). No conservation significant flora species were recorded within the application area (Woodman, 2011). No new biological surveys have been submitted in support of the amendment application and based on site characteristics, datasets and previous biological survey information, the following 14 conservation significant flora species could potentially occur within the application area.

*Acacia levata*, Priority 3, is a spreading, multi-stemmed shrub growing to five metres high and can be found inhabiting sandy or sandy loam soils over granite on hillslopes (Western Australian Herbarium, 1998-). The species is known from 20 locations from the WA Herbarium from the Pilbara Interim Biogeographic Regionalisation for Australia (IBRA) region (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Bulbostylis burbridgeae*, Priority 4, is a tufted, erect to spreading annual, grass-like or herb (sedge), growing 0.03-0.25 metres high and can be found inhabiting granitic soils on granite outcrops or cliff bases (Western Australian Herbarium,

1998-). The species is known from 35 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 20 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Eragrostis crateriformis*, Priority 3, is an annual, grass-like herb growing 0.17-0.42 metres high and can be found inhabiting clayey loam or clay on creek banks and depressions (Western Australian Herbarium, 1998-). The species is known from 53 locations from the WA Herbarium from the Carnarvon, Great Sandy Desert, Pilbara and IBRA regions (Western Australian Herbarium, 1998-). The species has been recorded within 10 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Euphorbia clementii*, Priority 3, is an erect herb growing 0.6 metres high and can be found inhabiting gravelly hillsides and stony grounds (Western Australian Herbarium, 1998-). The species is known from 31 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Euploca mutica*, Priority 3, a low shrub which can be found inhabiting plains with red brown loamy sand (Western Australian Herbarium, 1998-). The species is known from 76 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 10 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Gomphrena leptophylla*, Priority 3, is a prostrate or erect to spreading annual herb growing to 0.15 metres high and can be found inhabiting sand, sandy to clayey loam, granite and quartzite soils on open flats, sandy creek beds, edges salt pans, marshes and stony hillsides (Western Australian Herbarium, 1998-). The species is known from eight locations from the WA Herbarium from the Dampierland, Ord Victoria Plain, Pilbara and Tanami IBRA regions (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Gymnanthera cunninghamii*, Priority 3, is an erect shrub growing 1-2 metres high and can be found inhabiting sandy soils (Western Australian Herbarium, 1998-). The species is known from 40 locations from the WA Herbarium from the Carnarvon, Gascoyne, Great Sandy Desert and Pilbara IBRA regions (Western Australian Herbarium, 1998-). The species has been recorded within 20 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Nicotiana umbratica*, Priority 3, is an erect, short-lived annual or perennial herb which can be found inhabiting shallow soils on rocky outcrops (Western Australian Herbarium, 1998-). The species is known from 18 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Phyllanthus hebecarpus*, Priority 3, is tall shrub which can be found inhabiting granite outcrops (Western Australian Herbarium (1998-). The species is known from 7 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Ptilotus mollis*, Priority 4, is a compact, perennial shrub growing to 0.5 metres high and can be found inhabiting stony hills and screes (Western Australian Herbarium, 1998-). The species is known from 43 locations from the WA Herbarium from the Little Sandy Desert and Pilbara IBRA regions (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Rothia indica subsp. australis*, Priority 3, is a prostrate annual herb growing to 0.3 metres high and can be found inhabiting sandy soils on sandhills and sandy flats (Western Australian Herbarium, 1998-). The species is known from 21 locations from the WA Herbarium from the Dampierland, Great Sandy Desert, Pilbara and Victorie Bonaparte IBRA regions (Western Australian Herbarium, 1998-). The species has been recorded within 20 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Terminalia supranitifolia*, Priority 3, is a spreading, tangled shrub or tree growing 1.5-3 metres high and can be found inhabiting sand among basalt rocks (Western Australian Herbarium, 1998-). The species is known from 53 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Triodia chichesterensis*, Priority 3, is a hummock grass which can be found inhabiting rocky basalt slopes (Western Australian Herbarium, 1998-). The species is known from 42 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been recorded within 20 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

*Vigna triodiophila*, Priority 3, is a trailing herb which can be found inhabiting stony red-brown clay loam among dolerite boulders on very steep slopes (Western Australian Herbarium, 1998-). The species is known from 21 locations from the WA Herbarium from the Pilbara IBRA region (Western Australian Herbarium, 1998-). The species has been



recorded within 50 kilometres of the application area, however it was not recorded during the flora and vegetation survey (Woodman, 2011).

The application area contains suitable habitat for these priority flora species and therefore individuals may occur, however the species are not considered to be restricted to the proposed clearing area and suitable habitat can be found in the local area, any impacts to this species as a result of extending the proposed clearing duration is unlikely to lead to a significant impact to the conservation status of this species.

Woodman (2011) recorded five floristic community types within the application area, one of these was considered locally significant but may not be considered regionally significant. Extending the duration of the permit will not likely lead to an unacceptable risk and may be managed by the avoid and minimise condition.

A review of fauna habitat, historical records and biological survey information has identified the following changes since the previous assessment:

Five conservation significant fauna species were recorded within the Mt Dove study area (Outback Ecology, 2011a):

- Northern quoll (*Dasyurus hallucatus*) – EPBC Act – Endangered;
- Pilbara leaf-nosed bat (*Rhinonictis aurantia* (Pilbara)) – EPBC Act – Vulnerable;
- Ghost Bat (*Macroderma gigas*) – previously Priority 4, this has since been elevated to Vulnerable under the EPBC Act;
- Australian Bustard (*Ardeotis australis*) - previously Priority 4, this has since been delisted;
- Rainbow Bee-eater (*Merops ornatus*) - previously listed as Migratory under the EPBC Act, this has since been removed from its conservation status (DCCEEW, 2023).

### Conclusion

Based on the above assessment, the proposed clearing may result in the removal of some priority flora. For the reasons set out above, it is considered that the impacts of the proposed clearing on flora can be managed by the mitigation and management strategies provided by the applicant.

### Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- avoid, minimise to reduce the impacts and extent of clearing; and
- take hygiene steps to minimise the risk of the introduction and spread of weeds.

## **3.3. Relevant planning instruments and other matters**

The clearing permit amendment application was advertised on 7 July 2023 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

This project was referred to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) (now the Department of Climate Change, Energy, the Environment and Water (DCCEEW)) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), due to the presence of EPBC Act listed fauna species within the project area. The project was deemed a 'controlled action' and required assessment under the EPBC Act with the level of assessment being set at Preliminary Documentation. Final approval for the project was given on 13 January 2012 and was subject to 12 conditions.

One of the environmental conditions as per the applicants EPBC Act approval is the preparation and implementation of a Significant Species Management Plan that maximises the ongoing protection and long term conservation of EPBC Act listed threatened fauna species. Other conditions include a 20 metre buffer around a significant cave and financial contributions to research into threatened fauna (DSEWPaC, 2012). The implementation of the conditions imposed by the DSEWPaC approval will minimise and mitigate the impact of the clearing on conservation significant fauna species and the landforms with which they are associated.

There is one native title claim (Kariyarra People (WAD6169/1998) over the area under application (DPLH, 2023). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2023). 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.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan approved under the *Mining Act 1978*.

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

**End**

## Appendix A. Site characteristics

### A.1. Site characteristics

Characteristic	Details
Local context	The project is located approximately 60 kilometres south of Port Hedland, within the Town of Port Hedland (GIS Database). The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia (GIS Database). The surrounding land use includes iron ore prospecting and exploration and pastoral grazing (Coffey Environments, 2012).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	The proposed clearing is not located within a conservation reserve (GIS Database). The nearest conservation area is Mungaroona Nature Reserve (R 31429), which is located approximately 50 kilometres south-west of the application area (GIS Database).
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation association: 39: Hummock grasslands, shrub steppe kanji over soft spinifex (GIS Database).</p> <p>A Level 2 flora and vegetation survey was undertaken over the Mt Dove area, including the application area, in June 2010 by botanists from Woodman Environmental Consulting Pty Ltd. Five floristic community types (FCTs) from two super groups were described within the larger survey area, with one of the FCTs further divided into two subtypes (FCT 5a and FCT 5b) (Woodman, 2011). Each of the FCTs occurred within the application area, except FCT 5b, and these are described below (Woodman, 2011):</p> <p><u>Super Group 1</u></p> <p><b>FCT 1</b> - Mid Open to Sparse Shrubland of mixed <i>Acacia</i> species including <i>A. inaequilatera</i>, <i>A. coleii</i> var. <i>coleii</i> and <i>A. ancistrocarpa</i> over Low Open Shrubland dominated by <i>Acacia stellaticeps</i> over Low Hummock Grassland dominated by <i>Triodia epactia</i> and/or <i>T. lanigera</i> on red sandy loams on lower slopes, flats and plains.</p> <p><b>FCT 2</b> - Low Isolated Trees of <i>Corymbia zygomphylla</i> or <i>Corymbia hamersleyana</i> over Mid Sparse Shrubland of mixed species including <i>Acacia ancistrocarpa</i>, <i>A. inaequilatera</i>, <i>A. sericophylla</i> and <i>A. acradenia</i> over Low Sparse Shrubland of mixed species including <i>Acacia stellaticeps</i>, <i>Pluchea tetranthera</i>, <i>Corchorus elachocarpus</i> and <i>Sida arenicola</i> over Low Hummock Grassland dominated by <i>Triodia lanigera</i> and/or <i>Triodia schinzii</i> on red sandy loams on lower slopes, flats and plains.</p> <p><b>FCT 3</b> - Low Sparse Shrubland of mixed species including <i>Pluchea tetranthera</i>, <i>P. ferdinandi-muelleri</i> and <i>Acacia stellaticeps</i> over Low Hummock Grassland of <i>Triodia lanigera</i> and <i>Triodia schinzii</i> on red sandy loams on lower slopes, flats and plains.</p> <p><u>Super Group 2</u></p> <p><b>FCT 4</b> - Mid Sparse Shrubland of mixed species including <i>Acacia inaequilatera</i>, <i>Grevillea wickhamii</i>, <i>A. ancistrocarpa</i> and <i>A. acradenia</i> over Low Sparse Shrubland of mixed species including <i>Corchorus elachocarpus</i>, <i>Indigofera monophylla</i> and <i>Goodenia stobbsiana</i> over Low Hummock Grassland of <i>Triodia epactia</i>, <i>Triodia wiseana</i> or <i>Triodia lanigera</i> on shallow stony red-brown sandy loams on slopes and crests of low rises and hills.</p> <p><b>FCT 5a</b> - Low Sparse Shrubland of mixed species including <i>Ptilotus obovatus</i>, <i>Aerva javanica</i> and <i>Capparis spinosa</i> var. <i>nummularia</i> over Low Hummock Grassland of <i>Triodia epactia</i> and <i>Eriachne mucronata</i> on skeletal red sandy loams over massive ironstone outcropping on mid and upper slopes and crests of hills.</p>
Vegetation condition	<p>The vegetation survey (Woodman, 2011) indicate the vegetation within the proposed clearing area is in 'Excellent' or 'Very Good' (Trudgen, 1991) condition, described as</p> <ul style="list-style-type: none"> <li>• Excellent: Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.</li> <li>• Very Good: Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.</li> </ul> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C.</p>

Characteristic	Details
Climate and landform	The climate of the region (Pilbara) is arid and is classified as desert because of its low, erratic rainfall where it experiences an average annual rain fall of 311.4 millimetres (BoM, 2023).
Soil description	The soils of the application area are broadly mapped as the following soil types: <ul style="list-style-type: none"> <li>• 281Ma: Mallina system. Sandy surfaced alluvial plains supporting soft spinifex grasslands and minor hard spinifex and tussock grasslands; and</li> <li>• 281Rt: Ruth system. Hills and ridges of volcanic and other rocks supporting shrubby hard spinifex and occasionally soft spinifex grasslands; and</li> <li>• 281Ua: Uaroo system. Broad sandy plains, pebbly plains and drainage tracts supporting hard and soft spinifex hummock grasslands with scattered acacia shrubs (DPIRD, 2023).</li> </ul>
Land degradation risk	The Mallina Land System is characterised by extensive sandy surfaced alluvial plains, sometimes with patchy scalds; soft spinifex hummock grasslands with numerous shrubs (Payne and Tille, 1992). This land system is prone to wind erosion resulting in the formation of bare scalds and hummocks (Payne and Tille, 1992).  The Ruth Land System is characterised by hills and ridges of volcanic and other rocks supporting hard spinifex (occasionally soft spinifex) grasslands (Van Vreeswyk et al., 2004). This land system is not susceptible to erosion (Van Vreeswyk et al., 2004).  The Uaroo Land System is characterised by broad sandy plains supporting shrubby hard and soft spinifex grasslands (Van Vreeswyk et al., 2004). There is occasionally some erosion but generally the system is not susceptible to erosion (Van Vreeswyk et al., 2004).
Waterbodies	There are no permanent or defined watercourses or wetlands within the application area (Woodman, 2011; GIS Database). The nearest defined watercourse is the Turner River, occurring on the eastern edge of the application area (Woodman, 2011; GIS Database).
Hydrogeography	The application area is not mapped within a proclaimed groundwater area (GIS Database). The proposed area is located within the Pilbara Groundwater Area (GIS Database).
Flora	A Level 2 flora and vegetation survey was undertaken over the Mt Dove area, including the application area, in June 2010 by botanists from Woodman Environmental Consulting Pty Ltd (Woodman). A total of 88 discrete native vascular plant taxa were recorded within the Mt Dove survey area (Woodman, 2011). No conservation significant flora species were recorded within the application area (Woodman, 2011). Based on site characteristics, datasets and biological survey information, 14 conservation significant flora species could potentially occur within the application area.  Two introduced flora species were recorded from the application area, Buffel Grass ( <i>Cenchrus ciliaris</i> ) and Kapok ( <i>Aerva javanica</i> ) (Woodman, 2011). Both species were recorded on the summit of Mount Dove, with an estimated total of over 3,300 individual Kapok Bush plants on Mount Dove (Woodman, 2011).
Ecological communities	There are no known Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest recorded TEC, Themeda grasslands on cracking clays, is located 140 kilometres south-west of the application area (GIS Database). No TECs were identified during the flora and vegetation survey conducted by Woodman botanists (Woodman, 2011).
Fauna	A total of 92 vertebrate fauna species were recorded during the detailed autumn and spring 2010 fauna surveys over the Mt Dove area, which included the application area. The fauna comprised of 17 native mammal, six introduced mammal, 40 bird and 29 reptile species (Outback Ecology, 2011). The following four broad habitat types were identified within the application area: <ul style="list-style-type: none"> <li>• Acacia shrublands on footslopes;</li> <li>• Rocky ridge;</li> <li>• Acacia, spinifex on sandplain; and</li> <li>• Stony rise (Outback Ecology, 2011).</li> </ul> Five conservation significant fauna species were recorded during the autumn and spring 2010 surveys (Outback Ecology, 2011).

## A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion Pilbara	17,808,657.04	17,731,764.88	99.57	1,801,714.98	10.12
Beard vegetation associations					

- State					
Veg Assoc No. 93	3,044,309.52	3,040,640.98	99.88	59,536.96	1.96
Beard vegetation associations					
- Bioregion					
Veg Assoc No. 93	3,042,114.27	3,038,471.67	99.88	59,536.96	1.96

Government of Western Australia (2019)

### A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Acacia levata</i>	Priority 3	Y	<50	20
<i>Bulbostylis burbidgeae</i>	Priority 4	Y	<20	35
<i>Eragrostis crateriformis</i>	Priority 3	Y	<10	53
<i>Euphorbia clementii</i>	Priority 3	Y	<20	31
<i>Euploca mutica</i>	Priority 3	Y	<10	76
<i>Gomphrena leptophylla</i>	Priority 3	Y	<50	8
<i>Gymnanthera cunninghamii</i>	Priority 3	Y	<20	40
<i>Nicotiana umbratica</i>	Priority 3	Y	<50	18
<i>Phyllanthus hebecarpus</i>	Priority 3	Y	<50	7
<i>Ptilotus mollis</i>	Priority 4	Y	<50	43
<i>Rothia indica subsp. australis</i>	Priority 3	Y	<20	21
<i>Stylidium weeliwollii</i>	Priority 3	N	<20	29
<i>Terminalia supranitfolia</i>	Priority 3	Y	<50	53
<i>Triodia chichesterensis</i>	Priority 3	Y	<20	42
<i>Vigna triodiophila</i>	Priority 3	Y	<50	21

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

### A.1. Fauna analysis table

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Actitis hypoleucos</i>	common sandpiper	MI	<20	N
<i>Anilius ganeii</i>	Gane's blind snake (Pilbara)	P1	<50	Y
<i>Apus pacificus</i>	fork-tailed swift	MI	<10	Y
<i>Arenaria interpres</i>	ruddy turnstone	MI	<20	N
<i>Calidris acuminata</i>	sharp-tailed sandpiper	MI	<20	N
<i>Calidris alba</i>	sanderling	MI	<50	N
<i>Calidris canutus</i>	red knot	EN	<50	N
<i>Calidris ferruginea</i>	curlew Sandpiper	CR	<50	N
<i>Calidris ruficollis</i>	red-necked stint	MI	<20	N
<i>Calidris subminuta</i>	long-toed Stint	MI	<50	N
<i>Calidris tenuirostris</i>	great knot	CR	<50	N
<i>Charadrius leschenaultii</i>	greater sand plover	VU	<50	N
<i>Charadrius mongolus</i>	lesser sand plover	EN	<50	N
<i>Charadrius veredus</i>	oriental plover	MI	<50	N



Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Chlidonias leucopterus</i>	white-winged black tern	MI	<50	N
<i>Dasycercus blythi</i>	brush-tailed mulgara	P4	<10	Y
<i>Dasycercus cristicauda</i>	crest-tailed mulgara	P4	<50	Y
<i>Dasyurus hallucatus</i>	northern quoll	EN	0	Y
<i>Falco hypoleucos</i>	grey falcon	VU	<20	Y
<i>Falco peregrinus</i>	peregrine falcon	OS	<50	Y
<i>Fregata ariel</i>	lesser frigatebird	MI	<20	N
<i>Gelochelidon nilotica</i>	gull-billed tern	MI	<50	N
<i>Glareola maldivarum</i>	oriental pratincole	MI	<50	N
<i>Hipposideros stenotis</i>	northern leaf-nosed bat	P2	<50	Y
<i>Hirundo rustica</i>	barn swallow	MI	<50	Y
<i>Hydroprogne caspia</i>	caspian tern	MI	<20	Y
<i>Lagorchestes conspicillatus leichardti</i>	spectacled hare-wallaby (mainland)	P4	<20	Y
<i>Liasis olivaceus barroni</i>	pilbara olive python	VU	<20	Y
<i>Limosa lapponica</i>	bar-tailed godwit	MI	<50	N
<i>Macroderma gigas</i>	ghost bat	VU	<10	Y
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	VU	<10	Y
<i>Numenius madagascariensis</i>	eastern curlew	CR	<50	N
<i>Numenius minutus</i>	little curlew, little whimbrel	MI	<50	Y
<i>Numenius phaeopus</i>	whimbrel	MI	<50	N
<i>Pandion cristatus</i>	osprey	MI	<20	N
<i>Philomachus pugnax</i>	ruff (reeve)	MI	<50	N
<i>Plegadis falcinellus</i>	glossy ibis	MI	<50	N
<i>Pluvialis fulva</i>	Pacific golden plover	MI	<20	Y
<i>Pluvialis squatarola</i>	grey plover	MI	<50	N
<i>Pseudomys chapmani</i>	western pebble-mound mouse	P4	<10	Y
<i>Rhinonictes aurantia (Pilbara)</i>	Pilbara leaf-nosed bat	VU	<10	Y
<i>Sminthopsis longicaudata</i>	long-tailed dunnart	P4	<50	Y
<i>Thalasseus bergii</i>	crested tern	MI	<20	N
<i>Tringa brevipes</i>	grey-tailed tattler	P4	<20	N
<i>Tringa glareola</i>	wood sandpiper	MI	<50	N
<i>Tringa nebularia</i>	common greenshank	MI	<20	N
<i>Tringa stagnatilis</i>	marsh sandpiper	MI	<50	N
<i>Xenus cinereus</i>	terek sandpiper	MI	<50	N

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix B. Assessment against the clearing principles		
Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity." <u>Assessment:</u>	At variance  (as per CPS 4861/3)	Yes Refer to Section 3.2.1, above.

Assessment against the clearing principles	Variance level	Is further consideration required?
The area proposed to be cleared contains locally and regionally significant flora, fauna, habitats, assemblages of plants (Outback Ecology, 2011; Woodman, 2011; GIS Database).		
<p><b>Principle (b):</b> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared may contain foraging habitat for several conservation significant fauna species (Outback Ecology, 2011; GIS Database).</p>	<p>At variance</p> <p>(as per CPS 4861/3)</p>	<p>Yes</p> <p>Refer to Section 3.2.1, above.</p>
<p><b>Principle (c):</b> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Woodman, 2011).</p> <p>The vegetation associations within the application area are common and widespread within the region (Woodman, 2011), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	<p>No</p>
<p><b>Principle (d):</b> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>There are no known Threatened Ecological Communities (TECs) located within the application area and the flora and vegetation survey did not identify any TECs (Woodman, 2011; GIS Database).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	<p>No</p>
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><b>Principle (e):</b> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The application area falls within the Pilbara Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 93 (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared and is not at variance to this principle.</p>	<p>Not at variance</p> <p>(as per CPS 4861/3)</p>	<p>No</p>
<p><b>Principle (h):</b> <i>“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></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	<p>No</p>
<b>Environmental value: land and water resources</b>		
<p><b>Principle (f):</b> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>There are no permanent or defined watercourses or wetlands within the application area (Woodman, 2011; GIS Database). The nearest defined watercourse is the Turner River, occurring on the eastern edge of the application area (Woodman, 2011; GIS Database).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
Minor run-off lines occur on the slopes of Mt Dove, where water sheds from the feature during rainfall events. However, these are ephemeral and the vegetation of these areas is not different from the surrounding features (Woodman, 2011).		
<p><u>Principle (g):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are moderately susceptible to wind erosion (GIS Database). Noting the location of the application area, the proposed clearing is likely to have an appreciable impact on land degradation. Land degradation may be managed by implementing a staged clearing condition where potential impacts from erosion may be minimised by the implementation of a staged clearing condition requiring areas that are cleared are utilised within six months.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	No
<p><u>Principle (i):</u> <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."</i></p> <p><u>Assessment:</u></p> <p>There are no permanent or defined watercourses or wetlands within the application area (Woodman, 2011; GIS Database). The nearest defined watercourse is the Turner River, occurring on the eastern edge of the application area (Woodman, 2011; GIS Database).</p> <p>Minor run-off lines occur on the slopes of Mt Dove, where water sheds from the feature during rainfall events. However, these are ephemeral and the vegetation of these areas is not different from the surrounding features (Woodman, 2011).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	No
<p><u>Principle (j):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</i></p> <p><u>Assessment:</u></p> <p>The application area is located within the Turner River catchment area (GIS Database). Given the size of the area to be cleared (219 hectares) in relation to the size of the catchment area (480,186 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 4861/3)</p>	No

### Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

#### Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.

Condition	Description
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

## Appendix D. Sources of information

### D.1. GIS databases

Publicly available GIS Databases used (sourced from [www.data.wa.gov.au](http://www.data.wa.gov.au)):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

### D.2. References

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- Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2023) Species Profile and Threats Database. Available from: <https://www.dcceew.gov.au/environment/biodiversity/threatened>
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: [https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2\\_assessment\\_native\\_veg.pdf](https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf)
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[http://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey\\_Dec13.pdf](http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf)
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## 4. Glossary

### Acronyms:

<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i> , Western Australia
<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia (now DPLH)
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia (now DPIRD)
<b>DCCEEW</b>	Department of Climate Change, Energy, the Environment and Water, Australian Government
<b>DBCA</b>	Department of Biodiversity, Conservation and Attractions, Western Australia
<b>DER</b>	Department of Environment Regulation, Western Australia (now DWER)
<b>DMIRS</b>	Department of Mines, Industry Regulation and Safety, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia (now DMIRS)
<b>DoEE</b>	Department of the Environment and Energy (now DCCEEW)
<b>DoW</b>	Department of Water, Western Australia (now DWER)
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia (now DBCA)
<b>DPIRD</b>	Department of Primary Industries and Regional Development, Western Australia
<b>DPLH</b>	Department of Planning, Lands and Heritage, Western Australia
<b>DRF</b>	Declared Rare Flora (now known as Threatened Flora)
<b>DWER</b>	Department of Water and Environmental Regulation, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

**T**            **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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.

**CR Critically endangered species**

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

**EN Endangered species**

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

**VU Vulnerable species**

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

**Extinct Species:**

**EX Extinct species**

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

**EW Extinct in the wild species**

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

**Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

**MI Migratory species**

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).



Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**CD Species of special conservation interest (conservation dependent fauna)**

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**OS Other specially protected species**

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**P Priority species:**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.

**P1 Priority One - Poorly-known species**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. 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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.