

## 1. Application details and outcomes

### 1.1. Permit application details

<b>Permit number:</b>	9532/1
<b>Permit type:</b>	Purpose Permit
<b>Applicant name:</b>	Goldnet Pty Ltd
<b>Application received:</b>	16 December 2021
<b>Application area:</b>	0.0052 hectares
<b>Purpose of clearing:</b>	Installation of Solar Panels
<b>Method of clearing:</b>	Mechanical Removal
<b>Tenure:</b>	Miscellaneous Licence 59/178
<b>Location (LGA area/s):</b>	Shire of Yalgoo
<b>Colloquial name:</b>	Mt Singleton Communications Site Project

### 1.2. Description of clearing activities

Goldnet Pty Ltd proposes to clear up to 0.0052 hectares of native vegetation within a boundary of approximately 0.03 hectares, for the purpose of installing solar panels.

The application is to allow for the installation of a series of solar panels to provide additional off-grid power supply to a permanent telecommunications tower. The solar panels will require 0.0052 hectares of clearing adjacent to the existing telecommunications tower.

### 1.3. Decision on application and key considerations

<b>Decision:</b>	Grant
<b>Decision date:</b>	31 March 2022
<b>Decision area:</b>	0.0052 hectares (ha) of native vegetation

### 1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 16 December 2021. DMIRS advertised the application for public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets, supporting information provided by the applicant including the results of a flora and vegetation survey, the clearing principles set out in Schedule 5 of the EP Act proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- impacts to conservation significant flora.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the impacts of the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values..

The Delegated Officer decided to grant a clearing permit subject to conditions to:

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

## 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 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

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.

The targeted flora survey identified two Threatened flora species (*Acacia imitans* and *Acacia unguicula*) and four priority species (*Allocasuarina tessellata* Priority 1, *Grevillea scabrida* Priority 1, *Micromyrtus mucronulata* Priority 1 and *Micromyrtus ninghanensis* Priority 1) in the immediate vicinity.

The proposal was reconfigured in view of the survey results. The finalised proposal is for a free-standing tower and solar panels with footings in an area of approximately six metres by six metres, and associated fencing approximately 11 metres long in a previously cleared area. This proposal requires **no** clearing of native vegetation, or threatened or priority flora. Whilst the finalised proposal will **not** require clearing of native flora, it will be in close proximity to threatened plants, including one *Acacia imitans* (Threatened) seedling in a previously cleared area. Goldnet Pty Ltd have committed to obtaining a Threatened Flora Authorisation for inadvertent or accidental impact to Threatened Flora.

### 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see **Error! Reference source not found.**) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles identified that the impacts of the proposed clearing present a risk to biological values (flora and vegetation). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

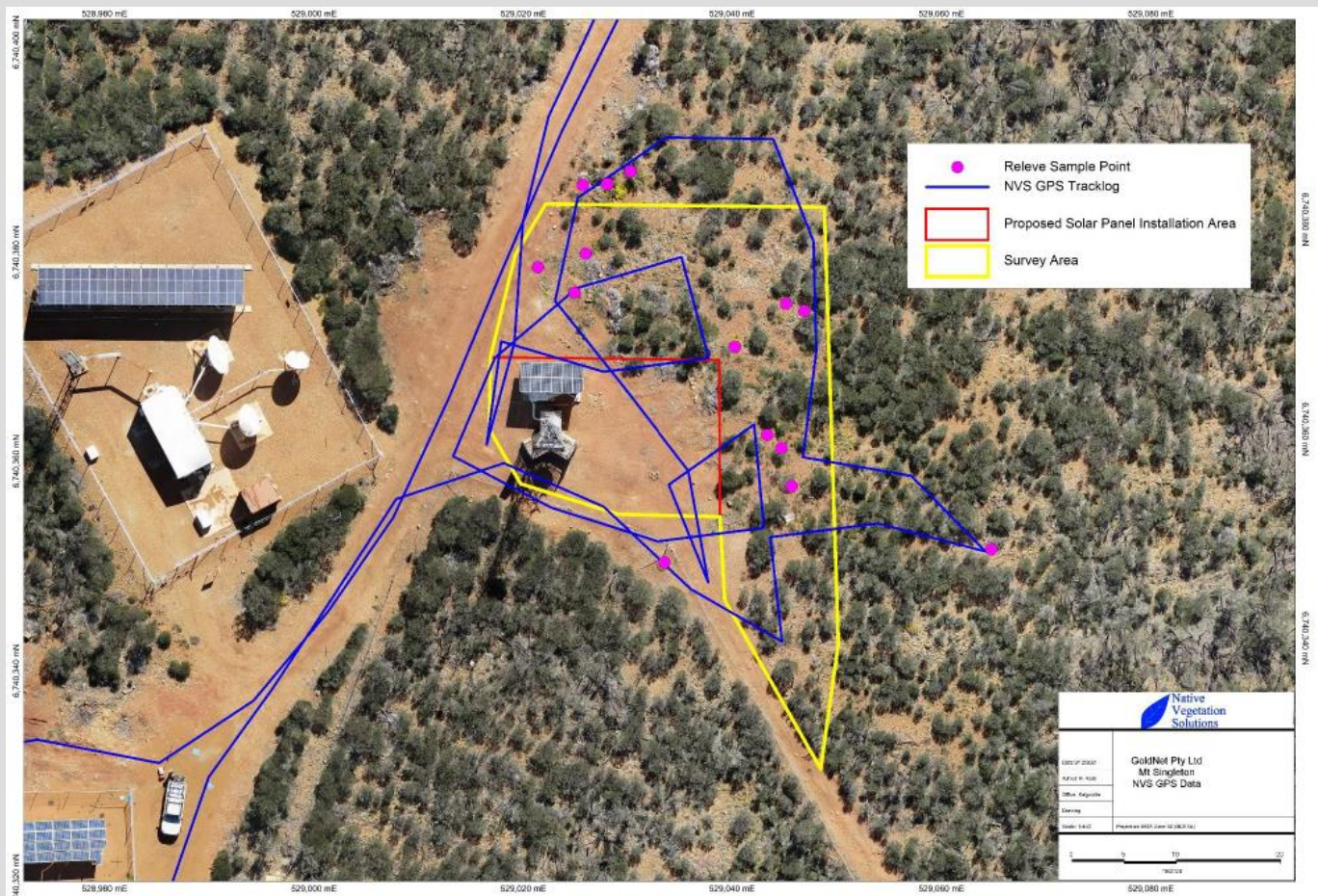
#### 3.2.1. Biological values (flora) - Clearing Principles (a) and (c)

##### Assessment

A targeted flora assessment of Miscellaneous Licence 59/178 and a surrounding 'flora census area' was completed by Woodgij in July 2020. Six species of conservation significance were identified within the broader survey area:

- *Acacia imitans* – Threatened;
- *Acacia unguicula* – Threatened;
- *Allocasuarina tessellata* – Priority 1;
- *Grevillea scabrida* – Priority 1;
- *Micromyrtus mucronulata* – Priority 1; and
- *Micromyrtus ninghanensis* – Priority 1.

Of the above species, only *Acacia imitans* was identified within or adjacent to the application area (RPM Global, 2021). An additional targeted flora survey was undertaken in November 2021 by Native Vegetation Solutions (NVS) to confirm the locations of *Acacia imitans* plants in the immediate area of the proposed solar panel bank extension and fence. NVS (2021) conducted the field assessment on the 18th November 2021 with two hours in total being spent covering the entire survey area on foot. During field work NVS (2021) confirmed the identity of *Acacia imitans* in native vegetation surrounding the solar panel installation area, however no Threatened Flora were recorded in the area proposed to be cleared. However, a total of 14 plants of *Acacia imitans* were recorded within 25 metres of the solar panel installation area (NVS, 2021):



In order to minimise potential impacts to conservation significant flora, Goldnet Pty Ltd have developed the Mt Singleton Communications Conservation Significant Flora Management Procedure (RPM Global, 2021). As part of this procedure, Goldnet Pty Ltd have made the following commitment:

- No clearing of Threatened species will be undertaken as part of the installation of the communications tower.

The approved mining proposal (Reg ID 101921) associated with this clearing permit has also imposed the following tenement condition under the *Mining Act 1978*:

- The development and operation of the project being carried out in such a manner to avoid disturbing all existing vegetation and natural landform, limit the project to the existing cleared area and not disturb regrowth should it occur, without Authorisation to take Threatened flora.

### Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on conservation significant flora or habitat for Threatened and Priority flora is not likely to be significant.

### Conditions

No flora management conditions are required on the clearing permit.

### 3.3. Relevant planning instruments and other matters

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan issued under *Mining Act 1978*.
- Works approval / licence issued under Part V Division 3 of the EP Act.
- Permit to interfere with bed and banks under the *Rights in Water and Irrigation Act 1914*.
- A Section 40 authorisation under the *Biodiversity Conservation Act*.

The clearing permit application was advertised on 14 January 2022 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application (DPLH, 2022). 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, 2022). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of 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	<p>The application area is located approximately 43 kilometres south-west of Paynes Find.</p> <p>The area proposed to be cleared is part of part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is situated within the Ninghan Station pastoral lease, Yalgoo Shire and Land District of Ninghan. There is an existing communications tower within the application area and there are also existing disturbances from access tracks, which are accessed by many users including, but not limited to, the Ninghan Pastoral Station Manager, Telstra, Australian Satellite Services, and the general public. Mt Singleton sits at an altitude of approximately 673 m above sea level and attracts the public due to its position as a lookout to Lake Moore and a public picnic area which is located to the south of Miscellaneous Licence L 59/178.</p>
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages.
Conservation areas	The closest conservation area is the former Warriedar Pastoral Lease which is located approximately 26 kilometres north-west of the application area.
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation association: 551: Shrublands; <i>Allocasuarina campestris</i> thicket (GIS Database).</p> <p>A targeted flora and vegetation survey was conducted over the application area by Woodgis during July, 2020 (RPM Global, 2021). A subsequent targeted flora and vegetation survey was also conducted over the application area by Native Vegetation Solutions during November, 2021 (RPM Global, 2021).</p> <p>The proposed clearing area is a sparsely vegetated cleared area, based on aerial imagery (GIS Database).</p>
Vegetation condition	Aerial imagery indicates that the vegetation within the proposed clearing area is likely to be in a Very Good (Vegetation structure altered; obvious signs of disturbance) (Keighery, 1994) condition.
Climate and landform	The application area is mapped at the elevation of 660 metres (GIS Database). The annual average rainfall (Yalgoo) is 258 millimetres (BoM, 2022).
Soil description	The soil is mapped as soil unit BE5 which is described as 'Ranges and their pedimented slopes, generally on metasediments, with a scattered ironstone gravel pavement: chief soils seem to be shallow earthy loams (Um5.3) underlain by a red-brown hardpan at less than 12 inches depth and which in places contains veins of CaCO <sub>3</sub> (Northcote 1960-68).'
Land degradation risk	The application area has been mapped as the Singleton land system (GIS Database). The Singleton land system is described as 'Rugged greenstone ranges with dense casuarina and acacia shrublands.'
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared.
Hydrogeography	There are no Public Drinking Water Source Areas within or in close proximity to the application area. The mapped groundwater salinity is 14,000-35,000 milligrams per litre total dissolved solids which is described as saline.
Flora	<p>There are records of two Threatened flora species and four priority flora species within the survey area:</p> <ul style="list-style-type: none"> <li>• <i>Acacia imitans</i> – Threatened;</li> <li>• <i>Acacia unguicula</i> – Threatened;</li> <li>• <i>Allocasuarina tessellata</i> – Priority 1;</li> <li>• <i>Grevillea scabrida</i> – Priority 1;</li> <li>• <i>Micromyrtus mucronulata</i> – Priority 1; and</li> <li>• <i>Micromyrtus ninghanensis</i> – Priority 1.</li> </ul>

Characteristic	Details
Ecological communities	There are no known Threatened or Priority Ecological Communities within the application area.
Fauna	There are no significant habitat features within the application area.

## A.2. Flora analysis table

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

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Acacia imitans</i>	Threatened	Y	Y	Y	0 (2 plants previously recorded); 41 individuals in broader area	Y
<i>Acacia unguicula</i>	Threatened	Y	Y	Y	0; 1 individual plant in broader area	Y
<i>Allocasuarina tessellata</i>	Priority 1	Y	Y	Y	0; 14 individual plants in broader area	Y
<i>Grevillea scabrada</i>	Priority 1	Y	Y	Y	0; 1 individual plant in broader area	Y
<i>Micromyrtus mucronulata</i>	Priority 1	Y	Y	Y	0; 32 individual plants in broader area	Y
<i>Micromyrtus ninghanensis</i>	Priority 1	Y	Y	Y	0; 37 individual plants in broader area	Y

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?
Environmental value: biological values		

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u></p> <p>The application area contains habitat for Threatened and Priority flora. However, the proposal has been designed to avoid clearing vegetation or directly impacting all known locations of conservation significant flora.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (b):</u> <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 is not likely to contain foraging, roosting, breeding, critical, or significant habitat for conservation significant fauna.</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> <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>The application contains habitat for Threatened flora species listed under the BC Act. The Threatened flora species are:</p> <ul style="list-style-type: none"> <li>• <i>Acacia imitans</i>; and</li> <li>• <i>Acacia unguicula</i>.</li> </ul>	May be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (d):</u> <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 or in close proximity to the permit area (GIS Database).</p> <p>The flora and vegetation surveys over the permit area have not identified any TECs (RPM Global, 2021).</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <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 Yalgoo Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99.36% of the pre-European vegetation still exists in the Yalgoo Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 551 (GIS Database). This vegetation association has not been extensively cleared as over 99.9% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). The permit area does not contain any remnants nor does it form part of any remnants in the local area (GIS Database).</p>	Not likely to be at variance	No
<p><u>Principle (h):</u> <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>There are no conservation areas in the vicinity of the application area. The nearest DBCA (formerly DPaW) managed land is the former Warriedar Pastoral Lease which is located approximately 26 kilometres north-west of</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
the application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.		
<b>Environmental value: land and water resources</b>		
<p><u>Principle (f):</u> <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>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact an environment associated with a watercourse or wetland.</p>	Not at variance	No
<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 application area lies within the Singleton land systems (GIS Database). This landsystem is described as “Rugged greenstone ranges with dense casuarina and acacia shrublands.” This land system is not generally susceptible to erosion (Payne et al., 1998).</p>	Not likely to be at variance	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 Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no watercourses or wetlands within the area proposed to clear (GIS Database). The proposed clearing is unlikely to result in significant changes to surface water flows or to cause deterioration in the quality of underground water.</p>	Not likely to be at variance	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 climate of the region is semi-arid, with a low average rainfall of approximately 258 millimetres per year (BoM, 2022). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall.</p> <p>There are no water courses or waterbodies within the application area and no alterations will be made to the surface water drainage system of the application area or its surrounds (RPM Global; GIS Database).</p>	Not likely to be at variance	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.



Condition	Description
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.
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. Biological survey information excerpts / photographs of the vegetation / DMIRS site inspection report**



**Figure 8: Boundaries of Priority Flora Census Area**  
Aerial imagery captured by Goldnet 19/06/2020

**Appendix E. Sources of information**

**E.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)
- Contours (DPIRD-073)
- 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)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)

- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- 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 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)

## E.2. References

- BoM (2022) Bureau of Meteorology Website – Climate Data Online, Yalgoo. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 1 March 2022).
- Department of Environment Regulation (DER) (2013) *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).
- Department of Planning, Lands and Heritage (DPLH) (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 8 March 2022).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: [https://dwer.wa.gov.au/sites/default/files/Procedure\\_Native\\_vegetation\\_clearing\\_permits\\_v1.PDF](https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF).
- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Available from: [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).
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Native Vegetation Solutions (2021) Targeted Threatened Flora Survey of the Mount Singleton Project Area, Report prepared by Native Vegetation Solutions for Goldnet Pty Ltd, December 2021.
- RPM Global (2021) Covering Letter with 10 Principles. Report prepared by RPM Global for Goldnet Pty Ltd, December 2021.
- 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.
- Woodgis (2020) Targeted Flora Survey – Mount Singleton Targeted For a Survey. Report prepared by Woodgis for Goldnet Pty Ltd, August 2020.

## 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>DAWE</b>	Department of Agriculture, Water and the Environment, 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 DAWE)
<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.