

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	9102/2
Permit type:	Purpose Permit
Applicant name:	Nexus Pinnacles Pty Ltd
Application received:	18 September 2025
Application area:	70 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 28/243 Miscellaneous Licence 28/41
Location (LGA area/s):	City of Kalgoorlie-Boulder
Colloquial name:	Pinnacles Project

1.2. Description of clearing activities

Nexus Pinnacles Pty Ltd proposes to clear up to 70 hectares of native vegetation within a boundary of approximately 252.237 hectares, for the purpose of mineral production and associated activities. The project is located approximately 98 kilometres northeast of Kalgoorlie-Boulder, within the City of Kalgoorlie-Boulder.

Clearing permit CPS 9102/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Mines, Petroleum and Exploration) on 17 December 2020 and was valid from 9 January 2021 to 30 November 2025. The permit authorised the clearing of up to 70 hectares of native vegetation within a boundary of approximately 252.237 hectares, for the purpose of mineral production and associated activities.

On 18 September 2025, the permit holder applied to amend CPS 9102/1 to extend the permit duration by five years to 30 November 2030. The area of clearing authorised and the permit boundaries remained unchanged.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	20 November 2025
Decision area:	70 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51KA(1) and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Mines, Petroleum and Exploration (DMPE) 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 (Appendix A), relevant datasets (Appendix E), including the results of a flora and vegetation survey (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of the clearing to undertake mineral production and associated activities.

Given the assessment has not changed since the assessment for CPS 9102/1 and after consideration of the available information, as well as the applicant's minimisation and mitigation measures (Section 3.1), the Delegated Officer determined that the proposed extension of the duration is unlikely to lead to appreciable land degradation nor have long-term adverse impacts on environmental values. The proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

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 (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)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

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, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The original permit application (CPS 9102/1) indicated the method of clearing would be raised blade and no other minimisation or mitigation strategies were proposed. Due to the extent of the application area 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

As of June 2025, no clearing had been undertaken under CPS 9102/1 (Nexus Pinnacles, 2025). Flora and fauna surveys were undertaken over the application area in August 2020 (NVS, 2020; Terrestrial Ecosystems, 2020). A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed from the clearing permit decision report CPS 9102/1. The assessment against the clearing principles (Appendix B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with avoid and minimise, hygiene, and vegetation management conditions. The clearing method is also limited to raised blade. Given the values identified within the application area and the review of current information, additional flora and fauna surveys were not considered necessary for the assessment of this amendment.

3.3. Relevant planning instruments and other matters

The clearing amendment application was advertised on 7 October 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims over the area under application (DPLH, 2025). One claim (WCD2023/002) has been determined by the Federal Court on behalf of the claimant group (Nyalpa Pirniku). The other claim (WC2020/005) has been registered with the National Native Title Tribunal on behalf of the claimant group (Kakarra Part A). 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*.

Other relevant authorisations required for the proposed land use include:

- A Mining Development and Closure Proposal 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 area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is surrounded by the landscape and vegetation of the Murchison Bioregion. The proposed clearing is a part of a large undistributed tract of vegetation on a previously disturbed area (GIS Database). There was evidence of recent exploration activity and existing disturbance areas in the southern extremities of the application area (Terrestrial Ecosystems, 2020).
Ecological linkage	Based on aerial imagery, the application area does not form part of any formal or informal ecological linkages (GIS Database)
Conservation areas	The application area is not located in any known or mapped conservation areas. The closest record is Bullock Holes Timber Reserve located more than 50 kilometres west, southwest of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as: • Beard vegetation association 20: Low woodland; mulga mixed with <i>Allocasuarina cristata</i> and <i>Eucalyptus</i> sp. (GIS Database) The flora survey provided identified 14 vegetation groups within the survey area (NVS, 2020): • <i>Acacia burkittii</i> shrubland with emergent <i>Casuarina pauper</i> • <i>Eucalyptus salubris</i> thicket over sclerophyll shrubland • <i>Acacia burkittii</i> over <i>Maireana sedifolia</i> shrubland • <i>Eucalyptus stricklandii</i> woodland • <i>Eucalyptus lesouefii</i> woodland • Mulga Shrubland with emergent <i>Casuarina pauper</i> • <i>Casuarina pauper</i> over sclerophyll shrubland • <i>Acacia burkittii</i> thicket- drainage • <i>Eucalyptus salubris</i> woodland on rocky ironstone hills • <i>Casuarina pauper</i> over <i>Maireana sedifolia</i> shrubland • <i>Eucalyptus salubris</i> and <i>Eucalyptus salmonophloia</i> woodland over <i>Tecticornia disarticulate</i> • <i>Casuarina pauper</i> over chenopod shrubland • <i>Eucalyptus salmonophloia</i> woodland • Existing disturbance Representative photos can be found in Appendix D.
Vegetation condition	The vegetation survey (NVS, 2020) and aerial imagery indicate the vegetation within the proposed clearing area is in Poor to Very Good (Trudgen, 1991) condition. The full Trudgen (1991) condition rating scale is provided in Appendix C.
Climate and landform	The application area is located within the arid climate of the Murchison bioregion and has an average annual rainfall of 264.7 millimetres (BoM, 2025). Rainfall is relatively even throughout the year (NVS, 2020).
Soil description	The soils in the application area are in the majority mapped as friable non-cracking clay and red loamy earth. Some areas of the application area feature red-brown hardpan shallow loam (DPIRD, 2025).
Land degradation risk	The application area lies within the Helag, Kanowna, and Illaara land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industry and Regional Development). The Helag land system is described as featuring hardpan plains and central drainage tracts. These characteristics support mulga and eucalypt (mallee) woodlands with minor chenopod shrublands. Areas with reduced perennial shrub cover are susceptible to water erosion (Waddell and Galloway, 2023). The Kanowna land system is described as featuring undulating stony plains on metasedimentary and felsic volcanoclastic rocks with saline drainage tracts, which act to support scattered eucalypt woodland and halophytic shrublands. Areas without loamy plain landform are susceptible to water erosion (Waddell and Galloway, 2023). The Illaara land system is described as featuring low rises and undulating plains with ironstone gravel or calcrete mantles which support eucalypt woodlands and mulga-casuarina shrublands. This land system is not susceptible to erosion of any kind (Waddell and Galloway, 2023).

Characteristic	Details
	There is no risk in relation to salinity and phosphorus export levels (GIS Database).
Waterbodies	The desktop assessment and aerial imagery indicated that five minor, non-perennial watercourses transect the area proposed to be cleared (GIS, Database).
Hydrogeography	The application area is not within any legislated surface water areas (GIS, Database). The application area is located within the Goldfields Groundwater Area proclaimed under the Rights in Water and Irrigation Act (1914). The mapped groundwater salinity ranges between 14,000 and 35,000 milligrams per litre total dissolved solids which is described as saline to hypersaline (GIS Database).
Flora	There are records of four priority flora species within 20 kilometres of the application area. No conservation significant flora were recorded within the application area (NVS, 2020; GIS Database).
Ecological communities	The application area does not form part of any known or mapped Threatened or Priority Ecological Communities. The closest record is a Priority 3 Ecological Community 'Emu Land System' located approximately 52 kilometres west of the application area (GIS Database).
Fauna	There were no conservation significant fauna species recorded within the application area. There is one conservation significant fauna species (Malleefowl) that could occur within the application area, and three others that are unlikely to occur within the application area (Terrestrial Ecosystems, 2020).
Fauna habitat	Terrestrial Ecosystems (2020) recorded three habitat types within the application area referred to as: 'Mixed mulga woodland', 'Mixed open Eucalypt woodland over open shrubs and scattered grass understorey' and 'Casuarina pauper over mixed shrubs and chenopods' (Terrestrial Ecosystems, 2020). Representative photos can be found in Appendix D.

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (Appendix E), and biological survey information, impacts to the following conservation significant flora required further consideration. Only conservation significant flora within 20 kilometres of the application area was considered in order to gain context of the environmental values in the local area.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (local area)	Are surveys adequate to identify? [Y, N, N/A]
<i>Thryptomene eremaea</i>	P2	N	N	N	<15 km	2	Y
<i>Eremophila arachnoides subsp. tenera</i>	P3	Y	N	N	<10 km	5	Y
<i>Hysterobaeckea ochropetala subsp. cometes</i>	P3	N	N	N	<10 km	1	Y
<i>Stackhousia sp. Lake Mackay (P.K. Latz 12870)</i>	P1	N	N	N	<20 km	2	Y

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

(NVS, 2020; WAM, 1998-).

A.3. Fauna analysis table

The following species have been assessed to determine their likelihood of occurrence in the application area (GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (local area)	Are surveys adequate to identify? [Y, N, N/A]
<i>Leipoa ocellata</i> (Malleefowl)	VU	N	N	<5 km	67	Y
<i>Ogyris subterrestris petrina</i> (Arid Bronze Azure Butterfly)	CR	N	Y	<95 km	0	Y
<i>Polytelis alexandrae</i> (Princess Parrot)	P4	Y	Y	<130 km	0	Y

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (local area)	Are surveys adequate to identify? [Y, N, N/A]
<i>Apus pacificus</i> (Fork-tailed Swift)	MI	N	N	<85 km	0	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, MI: migratory, CD: conservation dependent, OS: other specially protected, P: priority

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<u>Principle (a):</u> “Native vegetation should not be cleared if it comprises a high level of biodiversity.” <u>Assessment:</u> In the last five years there has been one flora survey undertaken by Native Vegetation Solutions (2020). The vegetation associations, fauna habitats and landform types identified within the application area are unlikely to represent an area of higher biodiversity than surrounding areas (Terrestrial Ecosystems, 2020). There were four conservation significant flora species within 20 kilometres of the application area however they are unlikely to be impacted by clearing due to a lack of suitable habitat in the area. In the case of <i>Eremophila arachnoides subsp. Tenera</i> which does have suitable habitat in the application area, extensive surveys revealed there were no records to be found (NVS, 2020). No introduced (weed) species were recorded within the application area. There are suitable habitat conditions for native weed species <i>Carrichtera annua</i> (Ward’s Weed) and <i>Cenchrus ciliaris</i> (Buffel-grass) however surveys revealed there is a low prevalence of both species within the application area (NVS, 2020).	Not likely to be at variance (as per CPS 9102/1)	No
<u>Principle (b):</u> “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.” <u>Assessment:</u> A site visit was undertaken by Terrestrial Ecosystems (2020) on 18 August 2020 to assess fauna habitat types and condition in the project area. No conservation significant species were identified within the application area throughout the site visit, nor considered likely to utilise the application area or surrounds. <i>Leipoa ocellata</i> (Malleefowl – Vulnerable) have been observed in the bioregion however, there are no recent records of active breeding mounds in the vicinity of the application area. No mounds were recorded, and open fauna habitat and presence of feral and pest species significantly reduce the probability of Malleefowl utilising the application area (Terrestrial Ecosystems, 2020). <i>Ogyris subterrestris petrina</i> (Arid Bronze Azure Butterfly – Critically Endangered) are prevalent throughout the bioregion and are associated with the ant <i>Camponotus terebrans</i> in mallee vegetation. The survey found no records of the associated ant species meaning it is highly unlikely to occur within the application area (Terrestrial Ecosystems, 2020). <i>Polytelis alexandrae</i> (Princess Parrot – Priority 4) and <i>Apus pacificus</i> (Fork-tailed Swift – migratory) may infrequently be seen within the area, however clearing is unlikely to have an impact on these species’ due to the extent of suitable habitats nearby and as the fork-tailed swift is a completely aerial species (Terrestrial Ecosystems, 2020; GIS Database).	Not likely to be at variance (as per CPS 9102/1)	No
<u>Principle (c):</u> “Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Assessment:</u> There are no known records of Threatened flora in the application area (NVS, 2020; GIS Database). The closest record of Threatened flora is of <i>Micromyrtus serrulate</i> approximately 30 kilometres from the application area (GIS Database). The vegetation associations within the application area are common and widespread within the region (NVS, 2020; GIS Database) and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened (rare) flora.	(as per CPs 9102/1)	
<u>Principle (d):</u> “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.” <u>Assessment:</u> No State or Federally listed Threatened Ecological Communities (TEC) have been recorded within the permit area and there are no TECs near the application area (GIS Database).	Not likely to be at variance (as per CPS 9102/1)	No
Environmental value: significant remnant vegetation and conservation areas		
<u>Principle (e):</u> “Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.” <u>Assessment:</u> The application area lies in the Murchison Bioregion within the Eastern Murchison subregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). The flora identified within the application area is common, widespread and well-represented across the subregion (NVS, 2020). One commonly mapped vegetation type within the application area is Beard vegetation 20 which remains at over 99 per cent of its pre-European extent within the subregion and greater bioregion. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkages in the local area and is consistent with the national objectives and targets for biodiversity conservation in Australia (NVS, 2020; Commonwealth of Australia, 2001).	Not at variance (as per CPS 9102/1)	No
<u>Principle (h):</u> “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.” <u>Assessment:</u> Given the distance to the nearest conservation area is more than 50 kilometres, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).	Not likely to be at variance (as per CPS 9102/1)	No
Environmental value: land and water resources		
<u>Principle (f):</u> “Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.” <u>Assessment:</u> There are no permanent watercourses or wetlands within the area proposed to be cleared (GIS Database). However, the proposed clearing area intersects with five minor, non-perennial water courses that run off from a nearby non-perennial lake situated west of Lake Rebecca (GIS Database). The proponent intends to construct a haul road which transects with four of the five watercourses, and one water course intersects with the southern extremities of the proposed mining area. The watercourses only flow briefly immediately following significant rainfall (BoM. 2020). The vegetation community, ‘<i>Acacia burkittii</i> – drainage’ is associate with creek lines in the application area. Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition.	At variance (as per CPS 9102/1)	No
<u>Principle (g):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.” <u>Assessment:</u>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
The mapped soils vary in susceptibility to erosion however, noting the location of the application area and the scale of the proposed clearing area, it is not likely to cause appreciable land degradation.	(as per CPS 9102/1)	
<u>Principle (i):</u> "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." <u>Assessment:</u> There are no Public Drinking Water Sources, permanent watercourses, or wetlands within or in close proximity to the application area (GIS Database). The proposed clearing is unlikely to result in significant changes to surface water flows. The proposed clearing is unlikely to cause deterioration in the quality of underground water.	Not likely to be at variance (as per CPS 9102/1)	No
<u>Principle (j):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding." <u>Assessment:</u> There are no permanent watercourses or waterbodies within the application area (GIS Database). Between 2,400 and 2,800 millilitres evaporate from the region every year, significantly higher than the annual rainfall recorded, suggesting a low risk of flooding (Commonwealth of Australia, 2006). The observed drainage lines are common in the region and temporary localised flooding may only occur briefly in the event of heavy rainfall events. The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.	Not likely to be at variance (as per CPS 9102/1)	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.
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. Photographs of the vegetation

The following photographs represent the dominant vegetation groups identified by NVS (2020) in the application area.



Figure 1. *Eucalyptus salubris* and *Eucalyptus salmonophloia* woodland over *Tecticornia disarticulata*



Figure 2. *Casuarina pauper* over *Maireana sedifolia* shrubland



Figure 3. *Casuarina pauper* over *chenopod* shrubland



Figure 4. Mulga Shrubland with emergent *Casuarina pauper*



Figure 5. *Casuarina pauper* over sclerophyll shrubland

The following photographs represent the three fauna habitats identified by Terrestrial Ecosystems (2020) in the application area.



Figure 6. Mixed mulga woodland



Figure 7. Mixed open Eucalypt woodland over open shrubs and scattered grass understorey



Figure 8. *Casuarina pauper* over mixed shrubs and chenopods

Appendix E. Sources of information

E.1. GIS datasets

Publicly available GIS datasets used (sourced from www.data.wa.gov.au):

- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- WRIMS - Groundwater Areas (DWER-085)

Restricted GIS Databases used:

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

E.2. References

- Bureau of Meteorology (BoM) (2025a) Bureau of Meteorology Website – Climate Data Online, Kalgoorlie-Boulder Airport Weather Station. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 09 October 2025).
- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.
- Commonwealth of Australia (2006) Bureau of Meteorology Website – Average Evaporation, Evaporation: Average Monthly & Annual Evaporation. Bureau of Meteorology. <https://www.bom.gov.au/watl/evaporation/> (Accessed 24 October 2025).
- Department of Planning, Lands and Heritage (DPLH) (2025) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 15 October 2025).
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- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.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>
- Nexus Pinnacles (2025) Clearing permit application form, CPS 9102/1, received 10 November 2020.
- 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.
- Waddell PA and Galloway PD (2023) 'Land systems, soils and vegetation of the southern Goldfields and Great Western Woodlands of Western Australia', Technical bulletin 99, vol 2, Department of Primary Industries and Regional Development, Western Australian Government.
- Western Australian Herbarium (WAM) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dbca.wa.gov.au/> (Accessed 15 October 2025).

4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety (now DMPE)
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DMPE)
DMP	Department of Mines and Petroleum, Western Australia (now DMPE)
DMPE	Department of Mines, Petroleum and Exploration
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia

DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

DBCA (2023) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia:

Threatened species

T 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 the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of [Ministerial Guideline Number 1](#) and [Ministerial Guideline Number 2](#) that adopts the use of the International Union for Conservation of Nature (IUCN) [Red List of Threatened Species Categories and Criteria](#), and is based on the national distribution of the species.

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.

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.

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.

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

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).

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.

Specially protected species

SP 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).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or 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.

CD Species of special conservation interest (conservation dependent fauna)

Species of special conservation need that are 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).

Currently only fauna are listed as species of special conservation interest.

OS Other specially protected species

Species 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).

Currently only fauna are listed as species otherwise in need of special protection.

Priority species

P Priority species

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey 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 prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

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

Assessment of priority status 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 – known from few locations, none on conservation lands

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, for example, 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 for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 Priority Two - Poorly-known species – known from few locations, some on conservation lands

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, for example, 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 for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 Priority Three - Poorly-known species – known from several locations

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. These species need 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 a conservation dependent specially protected species.
- (c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.
- (d) Other species in need of monitoring.

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.