Department of **Mines, Petroleum and Exploration**

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11207/1
Permit type:	Purpose Permit
Applicant name:	Jetstone Holdings Pty Ltd
Application received:	28 July 2025
Application area:	23 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 63/683
	Miscellaneous Licence 63/98
Location (LGA area):	Shire of Esperance
Colloquial name:	Beete Gypsum Project

1.2. Description of clearing activities

Jetstone Holdings Pty Ltd proposes to clear up to 23 hectares of native vegetation within a boundary of approximately 23.9 hectares, for the purpose of gypsum mining and related activities (Jetstone, 2025). The project is located approximately 36 kilometres north-north-west of Salmon Gums, within the Shire of Esperance (GIS Database).

The application is to allow for gypsum mining, stockpiling, access and associated activities (Jetstone, 2025).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	18 December 2025
Decision area:	23 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51E 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 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant, including the results of a flora and vegetation survey (PGV, 2025)), 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 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 riparian vegetation;
- potential land degradation in the form of wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures.

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;
- maintain existing surface waterflow;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and

- commence construction no later than three months after undertaking clearing to reduce the risk of erosion.

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)

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, 2016b)

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.

Evidence was submitted by the applicant, demonstrating that that various avoidance and mitigation measures such as the following will be implemented:

- Only vegetation that is necessary to be cleared will be cleared on the access road;
- all vehicles entering will be clean of weeds;
- all removed vegetation will be stored separately to preserve it for future rehabilitation;
- clearing of no more than 10 hectares per annum; and
- proposed to develop to pit in stages and undertake progressive rehabilitation where feasible (Jetstone, 2025).

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (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.

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 standard avoid and minimise / hygiene / staged clearing / erosion management conditions.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 25 November 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WAD6020/1998) over the area under application (DPLH, 2025). This claim has been determined by the Federal Court on behalf of the claimant group. 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, 2025). 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 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 application area is located within the Eastern Mallee subregion of the Mallee bioregion (GIS Database). The application area is also located within the Stirling Province which is further divided into seven soil-landscape zones including the Salmon Gums Mallee Zone (GIS Database). It is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia (GIS Database). The application area is situated on the edge of an ephemeral playa lake, with land previously cleared for intensive agriculture located directly to its south (GIS Database).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	There are no conservation areas located within the application area (GIS Database). An un-named Nature Reserve (R 42943) is located approximately five kilometres east of the application area and Peak Charles National Park, Register of National Estate, is located 29 kilometres south-west of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: • 486: Mosaic: Medium woodland; salmon gum & red mallee / Shrublands; mallee scrub *Eucalyptus eremophila* (GIS Database). A flora and vegetation survey was conducted over the application area by PGV Environmental during October, 2022 (PGV, 2025). The following seven vegetation associations were recorded within the application area (PGV, 2025): • **EfEk**: *Eucalyptus flocktoniae/E. kumarlensis* Open Woodland over *Melaleuca teuthidoides/M. lanceolata* Tall Open Shrubland over *Beyeria cinerea* Low Shrubland (2.16 hectares); • **EsWrTh**: *Eucalyptus salicola* Low Open Woodland over *Westringia rigida/ Tecticornia halocnemoides* Low Shrubland (2.05 hectares); • **EsTh**: *Eucalyptus salicola* Open Woodland over *Cratystylis conocephala /Tecticornia halocnemoides* Low Open Shrubland (9.45 hectares); • **EsMt**: *Eucalyptus salicola* Open Woodland over *Melaleuca teuthidoides* Tall Shrubland over *Cratystylis conocephala/Atriplex vesicaria* Low Open Shrubland (0.17 hectares); • **EsEg**: *Eucalyptus salicola/E. gracilis* Open Woodland over *Beyeria cinerea/Cratystylis conocephala* Open Low Heath (1.7 hectares); • **Th**: *Tecticornia halocnemoides* Low Shrubland (0.68 hectares); and • **ThAv**: *Tecticornia halocnemoides/Tecticornia lylei/Atriplex vesicaria* Low Shrubland to Open Low Heath (7.67 hectares).
Vegetation condition	The vegetation survey indicate the vegetation within the proposed clearing area is in 'Excellent' to 'Pristine' (Keighery, 1994) condition, described as • Pristine: Pristine or nearly so, no obvious signs of disturbance. • Excellent: Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species. The full Keighery (1994) condition rating scale is provided in Appendix C.
Climate and landform	The application area experiences a mild semi-arid climate, precipitation is relatively evenly distributed throughout the year, however is more erratic and heavier per event on average in the summer than in the winter, with an average annual rainfall of 280.7 millimetres (BoM, 2025). PGV (2025) recorded two landforms within the application area: salt lake and lunette landforms.
Soil description and land degradation risk	The soils of the application area broadly mapped as the following soil type: • Sharpe Land System: Remnant playa lakes in paleochannels with fringing saline plains surrounded by sand sheets and lunettes, supporting mallee woodlands, melaleuca shrublands and spinifex (DPIRD, 2025a). The geomorphology of the Sharpe Land System is generally depositional surfaces; level to gently undulating loamy plains and playa plains with occluded playa lakes that are often aligned east-south-east to west-north-west; narrow, fringing, gently inclined playa margins; fringing lunettes with back slopes forming sand sheets (Waddell and Galloway, 2023). If stabilising perennial shrubs are lost, the lake margins within this land system may become increasingly vulnerable to wind erosion (Waddell and Galloway, 2023).
Waterbodies	The application area is located on the fringes of an ephemeral playa lake; Lake Tay (GIS Database).
Hydrogeography	There is no Public Drinking Water Source Area within or in close proximity to the application area (GIS Database). The application area entirely overlaps Lake Tay, a salt lake that periodically naturally floods, however there are no permanent watercourses or wetlands within the area proposed to clear (GIS Database).

Characteristic	Details
Flora	There are records of 28 conservation significant (Priority) flora species within 20 kilometres of the application area (GIS Database). No conservation significant flora species were identified within the application area (PGV, 2025).
Ecological communities	The application area is not mapped within a Threatened or Priority Ecological Community (TEC/PEC) (GIS Database).
Fauna	There are records of 13 conservation significant fauna species within 50 kilometres of the application area (GIS Database). No conservation significant fauna species have been recorded within the application area (GIS Database).

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Mallee	7,395,894.36	4,180,937.68	56.53	1.00	0.00
IBRA Subregion - Eastern Mallee	3,414,176.54	2,709,890.01	79.37	924,517.55	27.08
Local Government - Shire of Esperance	4,459,670.90	3,210,952.18	72.00	969,738.28	21.74
Beard vegetation associations - State					
Veg Assoc No. 486	436,130.35	255,973.29	58.69	28,301.64	6.49
Beard vegetation associations - Bioregion					
Veg Assoc No. 486	351,116.16	171,015.92	48.71	1.00	0.00
Beard vegetation associations - Subregion					
Veg Assoc No. 486	287,618.45	107,518.21	37.38	7,762.66	2.70

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 (PGV, 2025; Western Australian Herbarium, 1998-; GIS Database), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Distance of closest record to application area (km)	Number of known records (total)	Suitable habitat features? [Y/N]
Acacia amyctica	P2	<20	18	N
Acacia dissona var. *indoloria*	P3	<15	23	N
Acacia hystrix subsp. *continua*	P1	<15	6	N
Acacia truculenta	P3	<5	12	N
Angianthus newbeyi	P2	<5	4	Y
Aotus prosacris	P1	<20	2	N
Aotus sp. Dundas (M.A. Burgman 2835)	P2	<5	26	Y
Bossiaea flexuosa	P3	<5	31	N
Cyathostemon sp. Dowak (J.M. Fox 86/271)	P1	<5	2	Y
Cyathostemon sp. Esperance (A. Fairall 2431)	P1	<10	3	Y
Cyathostemon sp. Jyndabinbin Rocks (K.R. Newbey 7689)	P2	<15	8	N
Eremophila racemosa	P4	<10	36	N

Species name	Conservation status	Distance of closest record to application area (km)	Number of known records (total)	Suitable habitat features? [Y/N]
Eucalyptus brockwayi	P3	<25	79	N
Eucalyptus dissimulata subsp. *plauta*	P1	<15	23	N
Eucalyptus histophylla	P3	<15	48	N
Eutaxia actinophylla	P3	<10	19	N
Frankenia brachyphylla	P2	<10	5	Y
Frankenia drummondii	P3	<10	44	Y
Frankenia glomerata	P4	<15	69	N
Hydrocotyle perforata	P2	<10	4	Y
Myriophyllum petraeum	P4	<10	58	N
Persoonia baeckeoides	P1	<15	13	N
Pimelea pelinos	P1	<20	11	Y
Pterostylis elegantissima	P1	<5	3	N
Ptilotus ostentans	P3	<10	8	Y
Scaevola tortuosa	P1	<15	19	Y
Stylidium pulviniforme	P3	<5	28	Y
Stylidium sejunctum	P3	<25	34	N

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

A.4. Fauna analysis table

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

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
Actitis hypoleucos	common sandpiper	MI	<20	Y
Calidris ferruginea	curlew sandpiper	CR	<45	Y
Calidris ruficollis	red-necked stint	MI	<45	Y
Charadrius cucullatus	hooded plover, hooded dotterel	P4	<5	Y
Dasyurus geoffroii	chuditch, western quoll	VU	<40	N
Falco peregrinus	peregrine falcon	OS	<25	Y
Leipoa ocellata	malleefowl	VU	<10	N
Notamacropus irma	western brush wallaby	P4	<10	N
Oxyura australis	blue-billed duck	P4	<45	N
Paroplocephalus atriceps	Lake Cronin snake	P3	<15	Y
Phascogale calura	red-tailed phascogale, kenngoor	CD	<40	N
Platycercus icterotis xanthogenys	western rosella (inland)	P4	<40	Y
Pseudomys occidentalis	western mouse	P4	<45	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?
Environmental value: biological values		

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: A flora and vegetation survey was conducted over the application area by PGV Environmental during October 2022 (PGV, 2025). The Survey Area covered approximately 254 hectares including the 23 hectare application area (PGV, 2025). A total of 74 plant species was recorded within the Survey Area, of these, two were priority flora species (PGV, 2025). Three individuals of Priority 1 flora species *Pterostylis elegantissima* and several individuals of Priority 3 flora species *Angianthus newbeyi* were recorded less than a kilometre from the application area. (PGV, 2025). No conservation significant flora species were recorded within the area proposed to be cleared. The vegetation within the application area is unlikely to represent any Threatened or Priority Ecological Communities (GIS Database).	Not likely to be at variance	No
Principle (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."* Assessment: Desktop research identified seven conservation significant fauna species as potentially occurring within the application area (GIS Database). The Mallefowl (*Leipoa ocellata*, Vulnerable) occurs within the region, however it is unlikely to occur within the habitat types represented in the application area (Commonwealth of Australia, 2008). Some other fauna species of conservation significance (mostly migratory and marine birds) have the potential to occur within the application area (Commonwealth of Australia, 2008). However, none are likely to be specifically dependent on the fauna habitats within the application area, as they have broad distribution ranges and/or nomadic or migratory habits (Commonwealth of Australia, 2008).	Not likely to be at variance	No
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: 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 (PGV, 2025).	Not likely to be at variance	No
Principle (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."* Assessment: There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (GIS Database). The flora survey did not identify any TECs within the application area (PGV, 2025)	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (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."* Assessment: The application area falls within the Mallee Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 56% of the pre-European vegetation still exists in the IBRA Mallee Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 486: Medium woodland; salmon gum & red mallee / Shrublands; mallee scrub *Eucalyptus eremophila* (GIS Database). Approximately 58% of the pre-European extent of this vegetation association remains uncleared at the State level, and approximately 48% at the bioregional level (Government of Western Australia, 2019). The extent of the native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.	Not at variance	No
Principle (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."*	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Assessment: 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).		
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: There are no permanent watercourses or wetlands within the area proposed to be cleared (GIS Database). The application area covers parts of the lake bed along a portion of Lake Tay, a saline lake which stretches approximately 20 kilometres east-west, and its fringing vegetation (DPIRD, 2020). The lake is fed by direct precipitation and localised intermittent drainages and is internally draining where its surface is usually dry with only rare and episodic inundation (DPIRD, 2020; GIS Database). The proposed clearing of 23 hectares within a boundary of approximately 23.9 hectares includes removing vegetation associated with the lake bed; however, the vegetation associations present within the application area is present in great abundances within the surrounding areas and bioregion (GIS Database). Vegetation around the lake beds and gypsum ridges is sparse and the proposed clearing is unlikely to result in significant impact to the vegetation associated with the shores of the lake. Potential impacts to vegetation growing in association with the lake may be minimised by the implementation of a vegetation management condition.	At variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The application area lies within the Sharpe land system (DPIRD, 2020). This land system generally has depositional surfaces; level to gently undulating loamy plains and playa plains with occluded playa lakes that are often aligned east-south-east to west-north-west; narrow, fringing, gently inclined playa margins; fringing lunettes with back slopes forming sand sheets (Waddell and Galloway, 2023). If stabilising perennial shrubs are lost, the lake margins within this land system may become increasingly vulnerable to wind erosion (Waddell and Galloway, 2023). The application area is naturally prone to wind erosion, as a high proportion of its surface is devoid of significant vegetation. The removal of the remaining vegetation will increase the wind erosion hazard and possibly result in an increased airborne dust load during high wind events if the land surface is dry at the time. The proposed clearing of up to 23 hectares of native vegetation within a boundary of approximately 23.9 hectares, for the purpose of gypsum extraction may cause appreciable land degradation if not adequately managed. Potential land degradation may be minimised by the implementation of a staged clearing condition.	May be at variance	No
Principle (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."* Assessment: There are no permanent watercourses within the application area. A small portion of the application area intersects Lake Tay, however the proposed clearing is unlikely to result in the deterioration in the quality of surface water. There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). The groundwater in the application area is considered to be hypersaline, approximately >35,000 milligrams/litre total dissolved solids (GIS Database). The proposed clearing is not expected to have any impact on the quality of groundwater in the local area.	Not likely to be at variance	No
Principle (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."* Assessment: The climate of the region is semi-arid Mediterranean, with an average rainfall of approximately 280.7 millimetres per year (BoM, 2025). Most of the rain occurs	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
relatively evenly through the year with a more reliable slightly higher average in the winter months. In other months storms often produce a significant rainfall event followed by a period of low rainfall (PGV, 2025). The application area partially overlaps Lake Tay, a salt lake that naturally floods periodically. Removal of native vegetation within the application area on the lake will not contribute to further flooding (DPIRD, 2020). No drainage lines are associated with the lake around the application area, and the lake internally drains (GIS Database).		

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 Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Sources of information

D.1. GIS datasets

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

- 10 metre contours (DPIRD-073)
- Cadastre (Polygon) (LGATE-217)
- Clearing Instruments Proposals (Areas Applied to Clear) (DWER-075)
- 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)
- DBCA Fire History (DBCA-060)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- EPA Redbook Recommended Conservation Reserves 1976-1991 (DBCA-029)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Title (Determination) (LGATE-066)
- 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)
- Soil Landscape Mapping - Rangelands (DPIRD-063)
- Townsites (LGATE-248)
- WRIMS - Groundwater Areas (DWER-085)
- WRIMS - Surface Water Areas (DWER-082)

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)

D.2. References

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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

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4. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* 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	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (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	*Rights in Water and Irrigation Act 1914*, 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.