



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	6837/3
Permit type:	Purpose Permit
Applicant name:	Aragon Resources Pty Ltd
Application received:	23 September 2025
Application area:	400 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 52/95 Mining Lease 52/96 Mining Lease 52/99 Mining Lease 52/132 Mining Lease 52/133
Location (LGA area/s):	Shire of Meekatharra
Colloquial name:	Fortnum Gold Mine

1.2. Description of clearing activities

Aragon Resources Pty Ltd proposes to clear up to 400 hectares of native vegetation within a boundary of approximately 973 hectares, for the purpose of mineral production and associated activities. The project is located approximately 138 kilometres north of Meekatharra, within the Shire of Meekatharra.

Clearing permit CPS 6837/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Petroleum and Exploration) on 30 December 2015 and was valid from 22 January 2016 to 31 January 2021. The permit authorised the clearing of up to 400 hectares of native vegetation within a boundary of approximately 971.674 hectares, for the purpose of mineral production and associated activities.

CPS 6837/2 was granted on 12 November 2020, amending the permit to extend the duration by five years.

On 23 September 2025, the permit holder applied to amend CPS 6837/2 to extend the permit duration by five years.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	8 January 2026
Decision area:	400 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 D), supporting information provided by the applicant including a flora and vegetation survey as well as a fauna survey, 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;
- potential land degradation in the form of erosion; and

- potential impacts to riparian vegetation and watercourses.

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 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;
- staged clearing to minimise erosion; and
- vegetation management condition to avoid clearing riparian vegetation where practicable and maintain water flows.

The assessment has not changed since the assessment for CPS 6837/2. The Delegated Officer determined that the proposed extension of duration is not likely to lead to an unacceptable risk to environmental values.

1.5. Site map

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



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

2. Legislative context

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

In addition to the matters considered in accordance with section 51O of the EP Act (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)*
- *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)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004a)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004b)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The amendment application form (Aragon, 2025) indicates the mine footprint is designed to minimise new land clearing by prioritising the use of previously disturbed areas for any required development.

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

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the clearing permit decision report CPS 6837/2.

As of 30 June 2025, a total of 91.1 hectares of the approved 400 hectares of native vegetation has been cleared under CPS 6837/2. Previous surveys over the application area have not identified any conservation significant flora species or significant fauna habitats (Rapallo, 2012; Umwelt, 2012). Although the surveys used to inform this assessment are over a decade old (Rapallo, 2012; Umwelt, 2012), the application area has such a substantial amount of disturbance and existing mining infrastructure, that further surveying is unlikely to yield valuable environmental information for this assessment.

3.3. Relevant planning instruments and other matters

The clearing permit 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 is one native title claim (WCD2000/001) over the area under application (DPLH, 2025). This claim has been determined by the Federal Court on behalf of the claimant groups (Nharnuwangga Wajarri and Ngarlawangga). 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 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 Gascoyne bioregion (GIS Database). It forms part of the existing Fortnum Gold Mine Project which is described as a historical mine site with a high degree of disturbance (Umwelt, 2012).
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 within any known or mapped conservation areas. The closest record is an Unallocated Crown Land with Departmental interest for conservation and is located approximately 45 kilometres from the application area (GIS Database).
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <p>18: Low woodland; mulga (<i>Acacia aneura</i>); and</p> <p>29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database).</p> <p>A flora and vegetation survey was conducted over the application area by Umwelt Environmental Consultants between May and August 2012. The following vegetation types were recorded within the application area (Umwelt, 2012):</p> <p>S1 – Isolated tall shrubs of <i>Acacia kempeana</i>, <i>A. pruinocarpa</i>, <i>A. tetragonophylla</i> and <i>Grevillea berryana</i> over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>dominii</i>;</p> <p>S2 – Tall sparse shrubland of <i>Acacia aptaneura</i> and <i>A. aneura</i> with <i>A. citrinoviridis</i>, <i>A. tetragonophylla</i> and <i>A. kempeana</i> over low sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i>, <i>Eremophila galeata</i>, <i>E. georgei</i>, <i>E. glutinosa</i>, <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>dominii</i>;</p> <p>S3 – Tall sparse shrubland of <i>Acacia aptaneura</i> and <i>A. citrinoviridis</i> over low sparse shrubland of <i>Thryptomene decussate</i> over low sparse grassland of <i>Aristida contorta</i>;</p> <p>M1 – Low woodland to low open woodland of <i>Acacia aptaneura</i> and <i>A. aneura</i> with <i>A. pruinocarpa</i> and <i>A. citrinoviridis</i> over low sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i> and <i>Ptilotus obovatus</i> over low sparse grassland of <i>Digitaria brownie</i> and <i>Aristida contorta</i>;</p> <p>M2 – Open low woodland of <i>Acacia aptaneura</i> with <i>Grevillea berryana</i> over low sparse shrubland of <i>Ptilotus obovatus</i>, <i>Solanum lasiophyllum</i>, <i>Eremophila georgei</i> and <i>E. jucunda</i> subsp. <i>jucunda</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>dominii</i>; and</p> <p>C1 – Open low woodland of <i>Acacia cyperophylla</i> subsp. <i>cyperophylla</i> over tall open shrubland of <i>A. aptaneura</i> over low sparse shrubland of <i>Eremophila galeata</i>, <i>A. tetragonophylla</i> and <i>Grevillea deflexa</i> over low sparse grassland of <i>Eriachne helmsii</i>, <i>E. pulchella</i> subsp. <i>dominii</i> and <i>Sporobolus australasicus</i>.</p>
Vegetation condition	<p>The vegetation survey (Umwelt, 2012) indicates the vegetation within the proposed clearing area is in Degraded to Very Good (Keighery, 1994) condition. Since the application area is in the Eremaean Botanical Province of Western Australia, the vegetation is better described as being in Poor to Very Good (Trudgen, 1991) condition. This assessment is over a decade old and more recent aerial imagery (Section 1.5) shows much of the application area is in Completely Degraded (Trudgen, 1991) condition.</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C.</p>
Climate	The application area is located in an arid area (BoM, 2016) with an annual average rainfall (Meekatharra Airport) of 234.4 millimetres (BoM, 2025).
Soil description	The soils in the application area are mapped as red shallow sandy duplex, red loamy earth, red shallow loam, red-brown hardpan shallow loam, friable non-cracking clay and red deep sandy duplex (DPIRD, 2025).
Land degradation risk	The application area falls within the Durlacher, Horseshoe, Jamindie, and Three Rivers land systems (DPIRD, 2025).
Waterbodies	The desktop assessment and aerial imagery indicated that one minor, non-perennial watercourses transect the area proposed to be cleared (GIS Database).
Hydrogeography	The application area is located within the East Murchison Groundwater Area, which is legislated by the RIWI Act 1914. The mapped groundwater salinity is 500-1,000 milligrams per litre total dissolved solids which is described as marginal quality (GIS Database).

Characteristic	Details
Flora	The flora and vegetation survey by Umwelt (2012) did not identify any Threatened or Priority flora species. A desktop search within a 20 kilometre radius of the application area found six Priority flora species have been recorded in the local area.
Ecological communities	The flora and vegetation survey by Umwelt (2012) did not identify any Threatened or Priority Ecological Communities.
Fauna	The fauna survey did not identify any species of conservation significance within the application area (Rapallo, 2012). There have not been any records of conservation significant fauna species within 20 kilometres of the application area (GIS Database).
Fauna habitat	<p>A Level 1 flora and vegetation survey conducted by Umwelt (2012) from 7 to 10 May 2015 identified five vegetation types within the application area:</p> <p>S1 – Isolated tall shrubs of <i>Acacia kempeana</i>, <i>A. pruinocarpa</i>, <i>A. tetragonophylla</i> and <i>Grevillea berryana</i> over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>dominii</i>. This community occurs on stony hardpan plains;</p> <p>S2 – Tall sparse shrubland of <i>Acacia aptaneura</i> and <i>A. aneura</i> with <i>A. citrinoviridis</i>, <i>A. tetragonophylla</i> and <i>A. kempeana</i> over low sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i>, <i>E. galeata</i>, <i>E. georgei</i>, <i>E. glutinosa</i>, <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>dominii</i>. This community occurs on hardpan plains;</p> <p>M1 – Low woodland to low open woodland of <i>Acacia aptaneura</i> and <i>A. aneura</i> with <i>A. pruinocarpa</i> and <i>A. citrinoviridis</i> over low sparse shrubland of <i>Eremophila forrestii</i> subsp. <i>forrestii</i> and <i>Ptilotus obovatus</i> over low sparse grassland of <i>Digitaria brownie</i> and <i>Aristida contorta</i>. This community occurs on deeper soils on hardpan plains;</p> <p>M2 – Open low woodland of <i>Acacia aptaneura</i> with <i>Grevillea berryana</i> over low sparse shrubland of <i>Ptilotus obovatus</i>, <i>Solanum lasiophyllum</i>, <i>Eremophila galeata</i> and <i>E. jucunda</i> subsp. <i>jucunda</i> over low sparse grassland of <i>Aristida contorta</i> and <i>Eriachne pulchella</i> subsp. <i>pulchella</i>. This community occurs on minor drainage areas on hardpan plains;</p> <p>C1 – Open low woodland of <i>Acacia cyperophylla</i> subsp. <i>cyperophylla</i> over tall open shrubland of <i>A. aptaneura</i> over low sparse shrubland of <i>Eremophila galeata</i>, <i>A. tetragonophylla</i> and <i>G. deflexa</i> over low sparse grassland of <i>Eriachne helmsii</i>, <i>E. pulchella</i> subsp. <i>dominii</i> and <i>Sporobolus australasicus</i>. This community occurs on ephemeral creeks; and</p> <p>D – Disturbed/Cleared land.</p>

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> Species composition and vegetation types within the application area are typical of the local region and not considered to be unusually diverse (Umwelt, 2012). The application area has been extensively grazed and subject to disturbance by cattle, goats, rabbits and camels. The application area is immediately adjacent to existing mine site infrastructure (GIS Database). Due to the area being heavily disturbed, and the degraded condition of the vegetation present (Section 1.5) it is unlikely the application area contains suitable habitat for conservation significant flora of the region. The application area sits within the buffer of the Priority Ecological Community (PEC) ‘Robinson Range vegetation complexes (Banded Ironstone Formation)’ (GIS Database), however Umwelt (2012) did not record any banded iron formations or associated vegetation complexes associated with the PEC. No weed species were identified by Umwelt (2012) within the application area, however Bipinnate Beggartick (<i>Bidens bipinnata</i>) and Buffel grass (<i>Cenchrus ciliaris</i>)	Not likely to be at variance (as per CPS 6837/3)	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p>were identified in the local area. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area.</p> <p>Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p>		
<p>Principle (b): <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.”</i></p> <p>Assessment:</p> <p>The habitat types found within the application area are considered as being well represented in the local region and the application area does not contain habitats or faunal assemblages that are ecologically significant (Rapallo, 2012). Rapallo (2012) noted that the survey area, which includes the application area, was highly disturbed, with the majority of the survey area showing severe degradation of the understorey due to the presence of cattle.</p>	Not likely to be at variance (as per CPS 6837/3)	No
<p>Principle (c): <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p>Assessment:</p> <p>According to available databases, there are no known records of Threatened Flora within the application area (GIS Database). Based on flora and vegetation surveys conducted by Umwelt (2012), no Threatened Flora species were recorded within the application area. Due to the area being heavily disturbed, and the degraded condition of the vegetation present (Section 1.5) it is unlikely the application area contains suitable habitat for Threatened flora of the region.</p>	Not likely to be at variance (as per CPS 6837/3)	No
<p>Principle (d): <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>Assessment:</p> <p>According to available databases, there are no known Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is approximately 255 kilometres north east of the application area (GIS Database). No TECs were recorded during the vegetation survey (Umwelt, 2012).</p>	Not likely to be at variance (as per CPS 6837/3)	No
Environmental value: significant remnant vegetation and conservation areas		
<p>Principle (e): <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>Assessment:</p> <p>The application area falls within the Gascoyne Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). Over 99 per cent of the pre-European vegetation still exists in the Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 18 and 29 (GIS Database). These vegetation associations have not been extensively cleared as over 99 per cent of the pre-European extent of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).</p>	Not at variance (as per CPS 6837/3)	No
<p>Principle (h): <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>Assessment:</p> <p>Given the distance to the nearest conservation area (GIS Database), the proposed clearing is not likely to have an impact on the environmental values of known or mapped conservation areas.</p>	Not likely to be at variance (as per CPS 6837/3)	No
Environmental value: land and water resources		
<p>Principle (f): <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>Assessment:</p>	At variance (as per CPS 6837/3)	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p>There is one ephemeral watercourse within the application area known as Yarlarweelor Creek where it has been realigned for the Yarlarweelor open pit. This creek only flows in periods of high rainfall (Umwelt, 2012).</p> <p>Vegetation mapping of the application area identified one riparian vegetation type growing in association with Yarlarweelor Creek (vegetation type C1). This vegetation type is dominated by <i>Acacia cyperophylla</i> (Umwelt, 2012). Grazing impacts were observed along the creek and has resulted in a reduction of understorey cover. Vegetation type M2 was also identified on minor drainage areas on hardpan plains (Umwelt, 2012).</p> <p>Potential impacts to riparian vegetation as a result of the proposed clearing may be minimised by the implementation of a vegetation management condition.</p>		
<p>Principle (g): <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p>Assessment:</p> <p>The Durlacher land system consists of stony plains, lower tributary drainage plains and low stony rises, supporting scattered tall shrublands of mulga and other Acacias. In some areas pasture degradation has led to serious erosion by sheeting and gullying (Payne et al., 1987).</p> <p>The Horseshoe land system consists of gently undulating stony plains and low rounded hills and is generally not susceptible to erosion (Curry et al., 1994).</p> <p>The Jamindie land system consists of stony hardpan plains and rises supporting groved mulga shrublands, occasionally with spinifex understorey. Drainage tracts are moderately susceptible to erosion, some hardpan plains are slightly susceptible, and other parts are inherently resistant (Van Vreeswyk et al., 2004).</p> <p>The Three Rivers land system consists of broad hardpan plains with minor sandy banks and sparse Mulga shrublands. Sandy banks can be susceptible to erosion (Payne et al., 1988).</p> <p>Potential impacts from erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.</p>	May be at variance (as per CPS 6837/3)	No
<p>Principle (i): <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>Assessment:</p> <p>Given no permanent watercourses, wetlands, or Public Drinking Water Source Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.</p>	Not likely to be at variance (as per CPS 6837/3)	No
<p>Principle (j): <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>Assessment:</p> <p>With an average annual rainfall of 234.4 millimetres and an average annual evaporation rate of between 3,200 and 3,600 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2025; Commonwealth of Australia, 2006). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.</p>	Not likely to be at variance (as per CPS 6837/3)	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. Sources of information

D.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)
- DBCA Fire History (DBCA-060)
- 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)
- Townsites (LGATE-248)
- WA Now Aerial Imagery

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

Bureau of Meteorology (BoM) (2016) Bureau of Meteorology Website – Climate classification maps
http://www.bom.gov.au/isp/ncc/climate_averages/climate-classifications/ (Accessed 28 November 2025)

Bureau of Meteorology (BoM) (2025) Bureau of Meteorology Website – Climate Data Online, Meekatharra Airport Station.
Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 28 November 2025).

Commonwealth of Australia (2006) Bureau of Meteorology Website - Evaporation: Average Monthly & Annual Evaporation
<https://www.bom.gov.au/watl/evaporation/> (Accessed 9 December 2025).

Curry, P.J., Payne, A.L., Leighton, K.A., Hennig, P. and Blood, D.A. (1994) An Inventory and Condition Survey of the Murchison River Catchment and Surrounds, Western Australia.

Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. 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) (2025) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 9 December 2025).

Department of Primary Industries and Regional Development (DPIRD) (2025) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 28 November 2025).

Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2024-11/procedure-native-vegetation-clearing-permits.pdf>

Environmental Protection Authority (EPA) (2004a) Guidance for the Assessment of Environmental Factors - Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia, No. 56, June 2004.

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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.