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:	7541/3
Permit type:	Purpose permit
Applicant name:	Sandfire Resources Limited
Application received:	20 February 2026
Application area:	157.6 hectares
Purpose of clearing:	Mine closure and associated activities
Method of clearing:	Mechanical removal
Tenure:	Mining Lease 52/1071
	Miscellaneous Licence 52/170
Location (LGA area):	Shire of Meekatharra
Colloquial name:	Monty Project

1.2. Description of clearing activities

Sandfire Resources Limited proposes to clear up to 157.6 hectares of native vegetation within a boundary of approximately 1,761 hectares, for the purpose of mine closure and associated activities. The project is located approximately 150 kilometres north of Meekatharra, within the Shire of Meekatharra.

The application is to allow for closure and rehabilitation earthworks that are necessary for landforms to be reprofiled to their final design parameters (Sandfire Resources, 2026).

Clearing permit CPS 7541/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Petroleum and Exploration) on 18 May 2017 and was valid from 10 June 2017 to 30 June 2021. The permit authorised the clearing of up to 157.6 hectares of native vegetation within a boundary of approximately 1,761 hectares, for the purpose of mineral production.

CPS 7541/2 was granted on 6 May 2021, amending the permit to extend the duration of the permit by five years.

On 20 February 2026, the permit holder applied to amend CPS 7541/2 to extend the duration of the permit by five years, and to vary a permit condition.

Based on the most recent annual clearing report (reporting period 1 January 2025 to 31 December 2025, received 9 March 2026), a total of 114.72 hectares of native vegetation have been cleared under the permit.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	26 May 2026
Decision area:	157.6 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 (0), relevant datasets (Appendix E), supporting information provided by the applicant 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 facilitate mine closure and associated activities.

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 and waterflows; and
- 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 can be minimised and managed to be 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;
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion; and
- vegetation management (avoid riparian vegetation).

The assessment has not changed since the assessment for CPS 7541/2. The Delegated Officer determined that the proposed extension of permit duration and update of clearing purpose is not likely 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)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

Relevant agreements (treaties) considered during the assessment include:

- Japan-Australia Migratory Bird Agreement
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, 2014)
- Procedure: Native vegetation clearing permits (DWER, 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

Evidence was submitted by the applicant, demonstrating clearing would only be undertaken for the purposes of mine closure and associated activities and therefore be limited to backfilling excavated drainage channels, removal of linear infrastructure and reprofiling landforms to their final design parameters (Sandfire Resources, 2026). 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 (0) reveals that the assessment against the clearing principles has not changed significantly from the clearing permit decision report CPS 7541/2.

3.2.1. Biological values (flora) - Clearing principle (a)

Assessment

A level 1 flora and vegetation survey was undertaken by Mattiske Consulting (2014) over the application area between 9 August and 5 September 2014. A further level 2 flora and vegetation survey was undertaken by Mattiske Consulting (2016) over a restricted area of the Springfield Exploration Project Area between 19 and 23 October 2015.

Three conservation significant flora species were identified within the Monty Level 2 Study Area. Following a desktop assessment, a further 18 conservation significant flora species were identified as occurring within the local surrounds of the application area following a desktop assessment. No conservation significant flora species were identified within the application area. The following species were identified as potentially occurring within the application area, and/or having suitable habitat within the application area;

Homalocalyx echinulatus, Priority 3, inhabits laterite breakaways and sandstone hills (WA Herbarium, 1998-). There are 34 Western Australian Herbarium (1998-) records distributed across Gascoyne, Great Victoria Desert and Murchison IBRA bioregions. While there is suitable habitat within the application area, the species is not geographically restricted and is known within the conservation estate, so the proposed clearing is not considered likely to have a significant impact on the conservation of this species (WA Herbarium, 1998-).

Sida picklesiana, Priority 3, inhabits sandy clay loam soils on stony flats and hills, as well as laterite breakaways (Mattiske Consulting, 2016; WA Herbarium, 1998-). There are 32 Western Australian Herbarium (1998-) records distributed across the Gascoyne and Murchison IBRA bioregions. Suitable habitat for this taxon occurs within the proposed area to be cleared across several vegetation communities. Across the broader flora survey area 121 individuals were identified, 19 of which were located within the application area (Mattiske Consulting, 2016). Vegetation community S25 (see Appendix A.1) was previously removed from the application area as no clearing was required within the area (Sandfire Resources, 2017). The proposed clearing has previously had a minimal impact on known records of the species.

Hemigenia virescens, Priority 3, inhabits stony clay-loam soils on gravelly ironstone hills (WA Herbarium, 1998-). There are 11 Western Australian Herbarium (1998-) records distributed across the Gascoyne and Murchison IBRA bioregions. Suitable habitat for this taxon occurs across the majority of the application area in the form of stony footslopes and stony plains. Across the broader flora survey area over one thousand individuals were identified (Mattiske Consulting, 2016). As this species is not geographically restricted and is known within the conservation estate, the proposed clearing is not likely to have a significant impact on the conservation of the species (WA Herbarium, 1998-).As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Maireana prosthecochaeta, Priority 3, inhabits laterite, hills and salty places (WA Herbarium, 1998-). There are 24 Western Australian Herbarium (1998-) records distributed across the Gascoyne and Murchison IBRA bioregions, with multiple records in the conservation estate. As this species is not geographically restricted and is known within the conservation estate, the proposed clearing is not likely to have a significant impact on the conservation of the species (WA Herbarium, 1998-).

Indigofera fractiflexa subsp. *augustensis*, Priority 2, inhabits Acacia shrublands, hills and red/brown loam soils (WA Herbarium, 1998-). There are 20 Western Australian Herbarium (1998-) records distributed across the Gascoyne and Murchison IBRA bioregions. There is suitable habitat within the application area for this taxon, however, the species has not previously been recorded within the application area (Mattiske Consulting, 2016). Furthermore, nearby records are known to be limited to vegetation communities that are not present within the application area. As this species is not geographically restricted and is known within the conservation estate, the proposed clearing is not likely to have a significant impact on the conservation of the species (WA Herbarium, 1998-).

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing will not be significant on conservation significant flora, and can be managed by taking the steps to avoid and minimise the extent of the clearing.

Conditions

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

- avoid and minimise;
- take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- vegetation management (avoid riparian vegetation).

3.2.2. Biological values (fauna) - Clearing principle (b)

Assessment

A Level 1 fauna assessment was carried out by Bamford Consulting Ecologist (2016) over the application area in October 2015. Seven broad fauna habitats were identified (see Appendix A.1). A total of four conservation significant fauna species potentially occur within the application area (GIS Database).

Grey falcon

Grey falcon (*Falco hypoleucos*), Vulnerable, is an elusive species endemic to mainland Australia that inhabits open plains and low Acacia shrublands along Eucalypt-lined watercourses and drainage lines in arid inland regions (Bamford Consulting, 2016; Commonwealth of Australia, 2008; Menkhorst et al., 2019). The conservation significant species is considered an occasional visitor in the region. The habitat identified is well represented regionally and not considered locally significant. As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Malleefowl

Malleefowl (*Leipoa ocellata*) occur in a wide range of habitats generally consisting of a sandy substrate with trees between 3 and 8 metres in height and a shrub layer providing horizontal cover (DCCEEW, 2024). The large ground-dwelling bird favours long unburned and ungrazed mallee and constructs nests in sandy soils and leaf litter by building large mounds used for egg incubation (DCCEEW, 2024). There are no records of Malleefowl mounds within the application area over several years of exploration activities (Bamford Consulting, 2016). There is suitable habitat within the application area, and the occasional visitor may occur, however suitable habitat for mound construction is limited and marginal (Bamford Consulting, 2016). As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Peregrine falcon

Peregrine falcon (*Falco peregrinus*), Other Specially Protected Species, inhabits cliffs, coastal habitats, rivers, wooded watercourses, lakes and urban environments (Commonwealth of Australia, 2008). The conservation significant species is likely to occur within the survey area and may breed along the eucalypt-lined drainage systems directly adjacent to the application area. It has been previously recorded within the application area. The habitat identified is well represented regionally and not considered locally significant. As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Long-tailed dunnart

Long-tailed dunnart (*Antechinomys longicaudata*), Priority 4, inhabits rocky areas, such as banded ironstone hills and ridges (Bamford Consulting, 2016). The species is cryptic and appears in low densities. It is likely to occur within the survey area, however, has not been recorded in previous surveys. The habitat identified is well represented regionally and not considered locally significant. As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Brush-tailed mulgara

Brush-tailed mulgara (*Dasycercus blythi*), Priority 4, inhabits areas with mature hummock (spinifex) grassland and utilise vegetation types adjacent to drainage lines (NESP, 2021). There are over 200 records of brush-tailed mulgara within the local surrounds (50 kilometres) of the application area. However, given there is no suitable habitat within the application area it was determined that the conservation significant species was unlikely to occur within the application area (Bamford, 2016). As a result, the proposed clearing is not likely to have a significant impact on the conservation of this species.

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on habitat necessary for the maintenance of significant habitat for fauna can be managed to be managed to be environmentally acceptable.

Conditions

No fauna management conditions required.

3.3. Relevant planning instruments and other matters

The amendment application was advertised on 1 May 2026 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 (WC1999/046 – Yugunga-Nya People) over the area under application (DPLH, 2026). 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, 2026). 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 vegetation of the Gascoyne IBRA bioregion. The proposed clearing area is part of the existing Monty Copper Mine operations and involves rehabilitation earthworks needed throughout the mine closure phase of the project (Sandfire Resources, 2026).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	The application area falls within the Doolgunna Conservation Reserve (GIS Database). The area proposed for conservation was a former pastoral lease with an extend well over 85,000 hectares. The proponent has previously committed to a number of management measures to follow within their tenements that intersect the proposed conservation area (DMP, 2017).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: • 18: Low woodland; mulga (*Acacia aneura*); and • 29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database). A flora and vegetation survey was conducted over the application area by Mattiske Consulting Pty Ltd (2016) during October 2015. The following vegetation associations were recorded within the application area (Mattiske Consulting, 2016): • **C2**: Low open woodland of *Acacia aneura*, *Acacia pteraneura*, *Acacia craspedocarpa*, *Acacia tetragonophylla* over *Eremophila galeata* over *Alternanthera nodiflora* and *Cyperus centralis* over mixed grasses with occasional emergent *Eucalyptus victrix* on flow-lines with dolerite and ironstone pebbles on red/brown sandy loam gravel; • **C8:** Scrub to thicket of *Acacia pteraneura*, *Acacia tetragonophylla*, *Acacia pruinocarpa* and *Psydrax latifolia* over *Eremophila forrestii* subsp. *forrestii*, *Solanum lasiophyllum*, *Ptilotus obovatus*, *Aristida contorta*, *Monachather paradoxus* and *Bidens bipinnata* on red-brown clay soils drainage lines and seasonally wet low lying areas; • **C11:** Scrub of *Acacia* sect. *Juliflorae* (*A. incurvaneura*, *A. mulganeura*), and *Acacia pruinocarpa* over *Eremophila latrobei* and *Acacia rhodophloia* over *Eremophila forrestii* and *Senna artemisioides* subsp. *helmsii* on stony clay soils in minor drainage lines; • **LW1:** Low woodland of *Acacia aneura*, *Acacia incurvaneura*, *Acacia pruinocarpa* and *Grevillea berryana* over *Eremophila foliosissima*, *Eremophila forrestii* subsp. *forrestii* and *Eremophila galeata* over *Ptilotus* species and mixed grasses on red/brown sandy loam flats with ironstone pebbles; • **S1:** Open scrub of *Grevillea berryana*, *Acacia aneura* and *Acacia kempeana* over *Eremophila incisa*, *Eremophila margarethae*, *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus* and *Ptilotus schwartzii* over *Aristida contorta* and *Monachather paradoxus* on red/brown sandy loam flats with dolerite, ironstone and quartz (rarely) pebbles; • **S11:** Open scrub of *Acacia incurvaneura*, *Acacia pruinocarpa*, *Acacia mulganeura* and *Acacia cuthbertsonii* subsp. *cuthbertsonii* over *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus*, *Sida picklesiana* (P3) and *Solanum lasiophyllum* on orange to red-brown clay loam soils on flats; • **S12:** Open scrub of *Acacia macraneura* and *Acacia incurvaneura* over *Ptilotus schwartzii*, *Ptilotus obovatus*, *Solanum lasiophyllum*, *Eremophila galeata* and *Sida picklesiana* (P3) on red-brown clay loam soils with quartz pebbles on flats; • **S15:** Scrub of *Acacia incurvaneura* over *Ptilotus obovatus* and *Senna glutinosa* subsp. *pruinosa* over *Aristida contorta*, *Sclerolaena eurotioides* and *Maireana convexa* on red-brown clay soils with ironstone and quartz rocks on flats; • **S16:** Scrub to thicket of *Acacia incurvaneura*, *Acacia pruinocarpa*, *Acacia mulganeura* and *Acacia cuthbertsonii* subsp. *cuthbertsonii* over *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus*, *Sida picklesiana* (P3) and *Solanum lasiophyllum* on orange to red-brown clay loam soils on flat; • **S19:** Open scrub of *Acacia ramulosa* var. *ramulosa* over *Eremophila latrobei* subsp. *latrobei*, *Senna artemisioides* subsp. *helmsii* and *Ptilotus obovatus* on orange-brown clay loam soils on flats and slopes; • **S21:** Open low shrubland of *Dodonaea pachyneura*, *Thryptomene decussata* and mixed shrubs on red-brown clay loam soils on flats and upper slopes; • **S22:** Open low shrubland of *Solanum lasiophyllum*, *Ptilotus obovatus*, *Hemigenia virescens* (P3) and *Eremophila spectabilis* with emergent *Grevillea berryana* and mixed *Acacia* species over *Monachather paradoxus*, *Eragrostis kennedyae* and *Aristida contorta* on red-brown clay loam flats; and

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td>
S28: Scrub of Acacia sect. Juliflorae (A. mulganeura, A. incurvaneura), Acacia pruinocarpa and Grevillea berryana over Aluta maisonneuvei subsp. auriculata and Ptilotus schwartzii on red brown rocky clay soils on slopes and ridges of hills.
Representative photos are available in Appendix D.
</td></tr>
<tr><td>Vegetation condition</td><td>Vegetation surveys of the application area found the vegetation to be in Very Poor to Excellent condition (Trudgen, 1991).

The full Trudgen (1991) condition rating scale is provided in Appendix C.</td></tr>
<tr><td>Climate and landform</td><td>The climate of the Augustus subregion is described as a semi-arid, with the nearest weather station recording an average rainfall of approximately 203 millimetres per year (BoM, 2026; CALM, 2002).</td></tr>
<tr><td>Soil description</td><td>The following land systems are mapped within the application area (DPIRD, 2026):
<table>
<tr><th>Land system</th><th>Description</th></tr>
<tr><td>Beasley system</td><td>Low ridges, hills and lateralised residuals above stoney footslopes and broad, stony lower plains supporting scattered mulga and snakewood-dominated shrublands</td></tr>
<tr><td>Horseshoe system</td><td>Gently as undulating stony plains and low rounded hills based on Proterzoic metamorphic rocks, with somewhat saline drainage foci and alluvial tracts; supports scattered mulga and waita-while shrublands with halophytes</td></tr>
</table>
</td></tr>
<tr><td>Land degradation risk</td><td>The Beasley Land System is mostly resistant to erosion due to stony mantles, but minor erosion may occur in drainage tracts (Curry et al., 1994).

The Horseshoe Land System is generally not susceptible to erosion (Curry et al., 1994).</td></tr>
<tr><td>Waterbodies</td><td>The desktop assessment and aerial imagery indicated that three minor, non-perennial watercourses transect the area proposed to be cleared (GIS Database).</td></tr>
<tr><td>Hydrogeography</td><td>The nearest Public Drinking Water Source Area is Meekatharra Water Reserve (P1) located approximately 125 kilometres direction of the application area (GIS Database).

The application area is located within the East Murchison Groundwater Area and Gascoyne River and Tributaries surface water area proclaimed under the Rights in Water and Irrigation Act 1914 (GIS Database).

The groundwater salinity is mapped as 500 to 1,000 milligrams per litre total dissolved solids which is described as marginal (GIS Database).</td></tr>
<tr><td>Flora</td><td>There are no records of conservation significant flora within the application area (GIS Database). There are 21 conservation significant flora species within 50 kilometres of the application area including one record of Homalocalyx echinulatus located within 30 metres of the proposed area to be cleared (GIS Database).</td></tr>
<tr><td>Ecological communities</td><td>The application area does not form part of any known or mapped Threatened or Priority Ecological Communities (GIS Database). The closest record is part of the Priority 3 Ecological Community ‘Frederick Land System’ located approximately three kilometres north of the application area (GIS Database).</td></tr>
<tr><td>Fauna</td><td>There are no records of conservation significant fauna species within the application area (GIS Database). There are 12 conservation significant fauna species located within 50 kilometres of the application area (GIS Database).</td></tr>
<tr><td>Fauna habitat</td><td>A level 1 desktop and reconnaissance fauna assessment was conducted over the application area by Bamford Consulting Ecologists (2016) during October 2015. Seven broad fauna habitats were identified (Bamford, 2016):

Breakaways and lateritic slopes supporting Acacia shrublands (dominated by Mulga) with scattered Corymbia ferriticola;
Lateritic, gravelly hills supporting Mulga shrublands with an Eremophila shrub layer. Upper, stony slopes support areas of Thryptomene decussata and low myrtaceous heath;
Quartzite Hills supporting Acacia shrublands, with some areas of exposed outcropping. A large quartzite plateau occurs in the west of the project area supporting Acacia shrublands and areas of Thryptomene and low myrtaceous heath;
Dolerite Hills supporting Acacia shrublands, with rounded, stony slopes;
Stony footslopes and undulating stony plains supporting sparse / open Acacia and Eremophila shrublands;
Hardpan plains supporting groves of Mulga shrublands and Acacia pruinocarpa; and

</td></tr>
</table>

Characteristic	Details
	• Drainage tracts supporting dense Acacia shrublands with patches of fringing eucalypt woodland (*Eucalytpus*. *camaldulensis* or *Corymbia candida*). A major drainage line in the centre of the survey area is deeply incised and supports temporary waterbodies (pools) after flooding. Representative photos are available in Appendix D.

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 - Gascoyne	18,075,219.48	18,067,441.44	99.96	1,855,508.22	10.27
Beard vegetation associations - State					
Veg Assoc No. 18	19,892,306.46	19,843,148.07	99.75	1,317,179.00	6.62
Veg Assoc No. 29	7,903,991.45	7,898,973.24	99.94	496,367.56	6.28
Beard vegetation associations - Bioregion					
Veg Assoc No. 18	3,273,579.72	3,271,339.12	99.93	316,154.02	9.66
Veg Assoc No. 29	3,802,459.63	3,799,635.88	99.93	297,087.90	7.81

Government of Western Australia (2019)

A.3. Flora analysis table

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

Species name	Conservation status	Suitable habitat features ? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Likelihood of occurrence
Homalocalyx echinulatus	P3	N	<5	34	Unlikely – discussed in Section 3.2.1
Eucalyptus semota	P1	N	<5	27	Unlikely
Sida picklesiana	P3	Y	<5	32	Possible – discussed in Section 3.2.1
Ptilotus luteolus	P3	N	<5	20	Unlikely
Hemigenia virescens	P3	Y	<10	11	Possible – discussed in Section 3.2.1
Eremophila demissa	P1	N	<10	5	Unlikely
Hemigenia tysonii	P3	N	<15	25	Unlikely
Rhodanthe sphaerocephala	P1	N	<15	7	Unlikely
Ptilotus actinocladus	P1	N	<15	6	Unlikely
Maireana prosthecochaeta	P3	Y	<20	24	Possible – discussed in Section 3.2.1
Prostanthera ferricola	P3	N	<20	24	Unlikely
Goodenia berringbinensis	P4	N	<20	33	Unlikely
Indigofera fractiflexa subsp. *augustensis*	P2	Y	<25	20	Possible – discussed in Section 3.2.1 Shrubland acacia aneura S1
Dodonaea amplisemina	P4	N	<30	40	Unlikely
Eremophila fasciata	P3	N	<30	8	Unlikely

Species name	Conservation status	Suitable habitat features ? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Likelihood of occurrence
Verticordia jamiesonii	P3	N	<30	35	Unlikely
Eremophila arguta	P1	N	<35	7	Unlikely
Euphorbia sarcostemmoides	P1	N	<35	5	Unlikely
Goodenia sp. Banded Ironstone (A. Markey & S. Dillon 4454)	P1	N	<35	7	Unlikely
Eremophila saxatilis	P1	N	<50	6	Unlikely
Tribulus adelacanthus	P3	N	<50	19	Unlikely

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

(WA Herbarium, 1998-)

A.4. Fauna analysis table

The following conservation significant fauna species have been recorded within 50 kilometres of the application area (GIS Database).

Species name	Conservation status	Suitable habitat features ? [Y/N]	Distance of closest record to application area (km)	Number of known records (local area)	Likelihood of occurrence
Peregrine falcon (*Falco peregrinus*)	OS	N	<20	8	Resident – discussed in Section 3.2.2
Grey falcon (*Falco hypoleucos*)	VU	Y	<25	1	Possible – discussed in Section 3.2.2
Malleefowl (*Leipoa ocellata*)	VU	Y	<30	1	Possible – discussed in Section 3.2.2
Brush-tailed mulgara (*Dasycercus blythi*)	P4	N	<40	223	Unlikely – discussed in Section 3.2.2
Red-necked stint (*Calidris ruficollis*)	MI	N	<40	2	Unlikely
Common sandpiper (*Actitis hypoleucos*)	MI	N	<45	2	Unlikely
Common greenshank (*Tringa nebularia*)	MI	N	<45	1	Unlikely
Long-tailed dunnart (*Antechinomys longicaudata*)	P4	Y	<45	4	Resident – discussed in Section 3.2.2
Banded hare-wallaby (*Lagostrophus fasciatus fasciatus*)	VU	N	<50	1	Unlikely
Night parrot (*Pezoporus occidentalis*)	CR	N	<50	1	Unlikely
Princess parrot (*Polytelis alexandrae*)	P4	N	<50	1	Unlikely

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		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The vegetation communities identified within the application area are well represented regionally and not considered locally significant (Mattiske Consulting, 2016).	Not likely to be at variance (as per CPS 7541/2)	Yes *Refer to Section 3.2.1, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
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: The area proposed to be cleared does not contain habitat necessary for the maintenance of conservation significant fauna.	Not likely to be at variance (as per CPS 7541/2)	Yes *Refer to Section 3.2.2, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: As no Threatened flora species are known to occur in the local area (50 kilometres radius of the application area), the area proposed to be cleared is unlikely to contain flora species listed under the BC Act.	Not likely to be at variance (as per CPS 7541/2)	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 (TEC) within the application area (GIS Database). Vegetation surveys of the application area did not record any vegetation with characteristics of a TEC (Mattiske Consulting, 2016).	Not likely to be at variance (as per CPS 7541/2)	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 extend of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001; Government of Western Australia, 2019). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area (GIS Database).	Not at variance (as per CPS 7541/2)	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."* Assessment: The proposed area to be cleared is part of the proposed Doolgunna Conservation Reserve. This area was a former pastoral lease with an extend well over 85,000 hectares. The proponent has committed to a number of management measures as outlined in previous decision reports (DMP, 2017).	Not likely to be at variance (as per CPS 7541/2)	No
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). There are three minor, non-perennial watercourses that intersect the application area which are all ephemeral watercourses draining after rainfall events towards Gascoyne River to the west. The potential impacts to vegetation can be managed with the continued implementation of a vegetation management condition.	At variance (as per CPS 7541/2)	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: Minor localised erosion is possible following clearing when areas are exposed to wind and surface water flows (Curry et al., 1994). Potential impacts associate with localised erosion may be further minimised through the continued implementation of a staged clearing condition.	Not likely to be at variance (as per CPS 7541/2)	No

Assessment against the clearing principles	Variance level	Is further consideration required?
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: The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). Due to the current levels of groundwater salinity in the application area, it is unlikely that the proposed clearing would result in an incremental increase in groundwater salinity, nor cause deterioration in the quality of underground water. As a result, significant impacts to surface water and underground water are considered unlikely.	Not likely to be at variance (as per CPS 7541/2)	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: With an average annual rainfall of 203 millimetres and an average annual evaporation rate of approximately 3,600 millimetres there is likely to be little surface flow during normal season rains (BoM, 2006; 2026). Given the likelihood that surface flow is limited, the proposed clearing is not likely to cause or increase the incidence or intensity of flooding.	Not likely to be at variance (as per CPS 7541/2)	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

Representative photographs of vegetation communities identified within the application area (Mattiske Consulting, 2016):

Figure 1. **C2:** Low open woodland of *Acacia aneura*, *Acacia pteraneura*, *Acacia craspedocarpa*, *Acacia tetragonophylla* over *Eremophila galeata* over *Alternanthera nodiflora* and *Cyperus centralis* over mixed grasses with occasional emergent *Eucalyptus victrix* on flow-lines with dolerite and ironstone pebbles on red/brown sandy loam gravel.

Figure 2. **C8:** Scrub to thicket of *Acacia pteraneura*, *Acacia tetragonophylla*, *Acacia pruinocarpa* and *Psydrax latifolia* over *Eremophila forrestii* subsp. *forrestii*, *Solanum lasiophyllum*, *Ptilotus obovatus*, *Aristida contorta*, *Monachather paradoxus* and *Bidens bipinnata* on red-brown clay soils drainage lines and seasonally wet low lying areas.

Figure 3. **C9:** Scrub of *Acacia paraneura* and *Acacia tetragonophylla* with emergent *Corymbia candida* over *Digitaria brownii* and *Eriachne mucronata* on red-brown sandy clays soils in major drainage channels.

Figure 4. **C11:** Scrub of *Acacia* sect. Juliflorae (*A. incurvaneura*, *A. mulganeura*), and *Acacia pruinocarpa* over *Eremophila latrobei* and *Acacia rhodophloia* over *Eremophila forrestii* and *Senna artemisioides* subsp. *helmsii* on stony clay soils in minor drainage lines

Figure 5. **LW1:** Low woodland of *Acacia aneura*, *Acacia incurvaneura*, *Acacia pruinocarpa* and *Grevillea berryana* over *Eremophila foliosissima*, *Eremophila forrestii* subsp. *forrestii* and *Eremophila galeata* over *Ptilotus* species and mixed grasses on red/brown sandy loam flats with ironstone pebbles.

Figure 6. **S1:** Open scrub of *Grevillea berryana*, *Acacia aneura* and *Acacia kempeana* over *Eremophila incisa*, *Eremophila margarethae*, *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus* and *Ptilotus schwartzii* over *Aristida contorta* and *Monachather paradoxus* on red/brown sandy loam flats with dolerite, ironstone and quartz (rarely) pebbles.

Figure 7. **S6:** Heath of *Aluta maisonneuvei* subsp. *auriculata* with emergent *Grevillea berryana* and *Eremophila latrobei* subsp. *latrobei* on red-brown clay loam soils on lower to upper slopes.

Figure 8. **S11:** Open scrub of *Acacia incurvaneura*, *Acacia pruinocarpa*, *Acacia mulganeura* and *Acacia cuthbertsonii* subsp. *cuthbertsonii* over *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus*, *Sida picklesiana* (P3) and *Solanum lasiophyllum* on orange to red-brown clay loam soils on flats.

Figure 9. **S12:** Open scrub of *Acacia macraneura* and *Acacia incurvaneura* over *Ptilotus scwartzii*, *Ptilotus obovatus*, *Solanum lasiophyllum*, *Eremophila galeata* and *Sida picklesiana* (P3) on red-brown clay loam soils with quartz pebbles on flats.

Figure 10. **S15:** Scrub of *Acacia incurvaneura* over *Ptilotus obovatus* and *Senna glutinosa* subsp. *pruinosa* over *Aristida contorta*, *Sclerolaena eurotioides* and *Maireana convexa* on red-brown clay soils with ironstone and quartz rocks on flats.

Figure 11. **S16:** Scrub to thicket of *Acacia incurvaneura*, *Acacia pruinocarpa*, *Acacia mulganeura* and *Acacia cuthbertsonii* subsp. *cuthbertsonii* over *Eremophila forrestii* subsp. *forrestii*, *Ptilotus obovatus*, *Sida picklesiana* (P3) and *Solanum lasiophyllum* on orange to red-brown clay loam soils on flats.

Figure 12. **S19:** Open scrub of *Acacia ramulosa* var. *ramulosa* over *Eremophila latrobei* subsp. *latrobei*, *Senna artemisioides* subsp. *helmsii* and *Ptilotus obovatus* on orange-brown clay loam soils on flats and slopes.

Figure 13. **S21:** Open low shrubland of *Dodonaea pachyneura*, *Thryptomene decussata* and mixed shrubs on red-brown clay loam soils on flats and upper slopes.

Figure 14. **S22:** Open low shrubland of *Solanum lasiophyllum*, *Ptilotus obovatus*, *Hemigenia virescens* (P3) and *Eremophila spectabilis* with emergent *Grevillea berryana* and mixed Acacia species over *Monachather paradoxus*,

Figure 15. **S28:** Scrub of *Acacia* sect. Juliflorae (*A. mulganeura*, *A. incurvaneura*), *Acacia pruinocarpa* and *Grevillea berryana* over *Aluta maisonneuvei* subsp. *auriculata* and *Ptilotus schwartzii* on red-brown rocky clay soils on slopes and ridges of hills.

Appendix E. Sources of information

E.1. GIS datasets

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

- Cadastre (Polygon) (LGATE-217)
- 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
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Medium Scale Topo Contour (Line) (LGATE-015)
- Medium Scale Topo Water (Line) (LGATE-018)
- Medium Scale Topo Water (Polygon) (LGATE-016)
- Native Title (Determination) (LGATE-066)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Reserves (LGATE-227)
- 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 - Systems (DPIRD-064)
- 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)

E.2. References

Bamford Consulting Ecologists (Bamford) (2016) Monty Project Level 1 Fauna Assessment October 2015. Report prepared for Sandfire Resources Limited by Bamford Consulting Ecologists, March 2016.

Bureau of Meteorology (BoM) (2006) Map of average pan evaporation – Annual. Bureau of Meteorology. Average annual, monthly and seasonal evaporation maps, Bureau of Meteorology (Accessed 16 April 2026).

Bureau of Meteorology (BoM) (2026) Bureau of Meteorology Website – Climate Data Online, Bryah (Number 7008). Bureau of Meteorology. https://reg.bom.gov.au/climate/data/ (Accessed 11 May 2026).

Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commonwealth of Australia (2008) Species Profile and Threats Database. Department of Climate Change, Energy, the Environment and Water, Australia. https://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl (Accessed 8 May 2026).

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. Technical Bulletin No. 84, Department of Agriculture, South Perth.

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2024) National recovery plan for the Malleefowl (Leipoa ocellata). Available from: https://www.dcceew.gov.au/environment/biodiversity/threatened/publications/recovery/malleefowl

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 Mines and Petroleum (DMP) (2017) Clearing Permit Decision Report CPS 7541/1. Department of Mines and Petroleum, May 2017.

Department of Planning, Lands and Heritage (DPLH) (2026) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS (Accessed 11 May 2026).

Department of Primary Industries and Regional Development (DPIRD) (2026) 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 11 May 2026).

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.

Environmental Protection Authority (EPA) (2004b) Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia, No. 51, June 2004.

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

Mattiske Consulting Pty Ltd (2014) Level 1 Flora and Vegetation of the Springfield Study Area. Report prepared for Sandfire Resources NL Ltd by Mattiske Consulting Pty Ltd, November 2014.

Mattiske Consulting Pty Ltd (2016) Level 2 Flora and Vegetation of the Monty Survey Area. Report prepared for Sandfire Resources NL Ltd by Mattiske Consulting Pty Ltd, January 2016.

Menkhorst, P., Rogers, D., Clarke, R., Davies, J., Marsack, P., and Franklin, K. (2019) The Australian bird guide: Revised Edition. CSIRO Publishing, Victoria, 2019.

NESP Threatened Species Recovery Hub (NESP) (2021) Arid Zone Monitoring Species Profile: Brush-tailed mulgara, Project 3.2.5 findings factsheet. nespthreatenedspecies.edu.au/publications-and-tools/arid-zone-monitoring-species-profiles

Sandfire Resources Limited (2017) Additional information received via email, 11 May 2017.

Sandfire Resources Limited (2026) Clearing permit application form, CPS 7541/3, received 20 February 2026.

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.

Western Australian Herbarium (WA Herbarium) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dbca.wa.gov.au/ (Accessed 11 May 2026).

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.