



1. Application details and outcomes

1.1. Permit application details

Permit number:	6085/2
Permit type:	Purpose Permit
Applicant name:	Gum Creek Gold Mines Pty Ltd
Application received:	18 April 2024
Application area:	100 hectares
Purpose of clearing:	Mineral Production
Method of clearing:	Mechanical Removal
Tenure:	Mining Leases 53/153, 57/634 Miscellaneous Licences 53/46, 53/96, 57/47
Location (LGA area/s):	Shires of Sandstone and Wiluna
Colloquial name:	Gidgee Gold Project

1.2. Description of clearing activities

Gum Creek Gold Mines Pty Ltd proposes to clear up to 100 hectares of native vegetation within a boundary of approximately 1,926 hectares, for the purpose of mineral production. The project is located approximately 113 kilometres south-east of Meekatharra, within the Shires of Sandstone and Wiluna.

The application is to allow for the recommencement of open pit mining operations covered by this permit and anticipate the approved clearing being required in the near future (Gum Creek, 2024).

Clearing permit CPS 6085/1 was granted by the Department of Mines and Petroleum (now the Department of Energy, Mines, Industry Regulation and Safety) on 26 June 2024 and was valid from 19 July 2014 to 19 July 2024. The permit authorised the clearing of up to 100 hectares of native vegetation within a boundary of approximately 2022 hectares, for the purpose of mineral production.

On 18 April 2024, the Permit Holder applied to amend CPS 6085/1 to extend the permit duration by 10 years, reduce the clearing permit boundary, update the tenure on which clearing can be done and change the permit holder name from Panoramic Gold Pty Ltd to Gum Creek Gold Mines Pty Ltd.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	27 June 2024
Decision area:	100 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51KA(1) of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) on 18 April 2024. DEMIRS advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant including the results of a flora, vegetation and fauna surveys (Maia, 2012; Maia, 2013; MBS, 2013; Western Wildlife, 2013), 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 the recommencement of open pit mining operations (Gum Creek, 2024).

The assessment identified that the proposed clearing may result in:

- potential land degradation in the form of erosion;
- the loss of individual *Leipoa ocellata* (malleefowl) and *Dasyercus blythi* (brush-tailed mulgara);

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

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined 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:

- staged clearing to minimise the risk of erosion;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- avoid the clearing of vegetation growing in association with watercourses where possible and maintain waterflows;
- avoid the clearing of identified Priority flora species *Stenanthemum mediale*; and
- conduct a targeted flora survey across the application area prior to clearing to avoid impacting unidentified conservation significant flora species.

The assessment has not changed since the assessment for CPS 6085/1, except in the case of principle (a), changing from not likely at variance to may be at variance due to the potential impacts to priority flora species and the Priority Ecological Community, Montague Range vegetation complexes (banded ironstone formation). The Delegated Officer determined that the proposed amendments sought are not likely to lead to an unacceptable risk to environmental values, however given the age of the permit and that no additional surveys have been conducted, the Delegated Officer determined that only extending the permit duration by five years, instead of the requested ten, is appropriate.

1.5. Site map

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

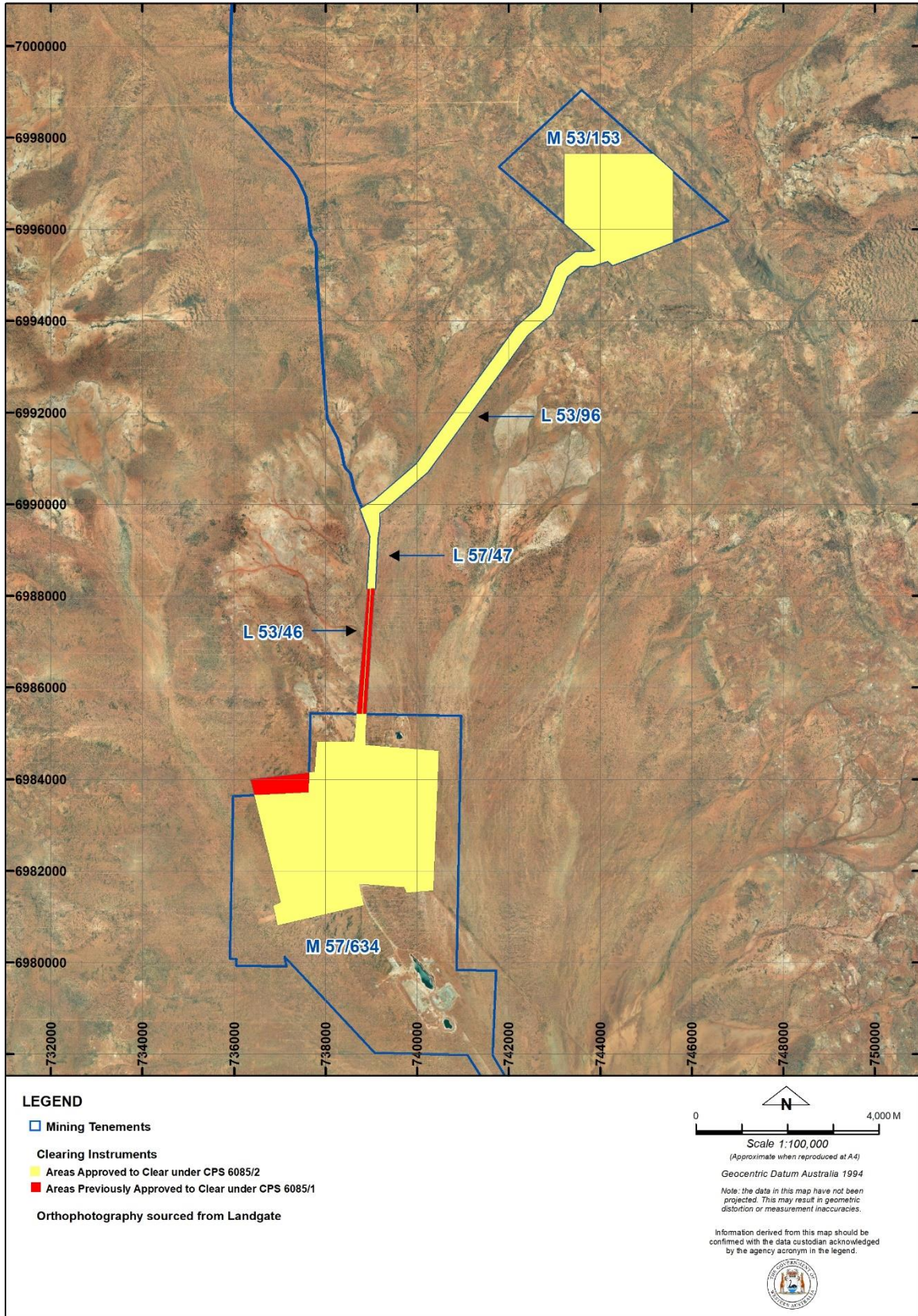


Figure 1. Map of the application area. The areas shaded yellow indicates the area within which authorised clearing can occur under the granted clearing permit. The red area indicates areas previously approved to clear under CPS 6085/1 that are no longer approved to clear under CPS 6085/2.

2. Legislative context

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

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant (MBS, 2015; Gum Creek, 2024), stating the following:

- Clearing will be limited to the minimum required for mining;
- Existing previously cleared areas are to be utilised wherever possible to reduce the requirement for clearing;
- Areas approved for clearing will be clearly delineated;
- All known locations of Priority 1 flora species, *Stenanthemum mediale* will be avoided;
- Sediment load with surface water runoff will be controlled through installation of sediment control structures at locations where high sediment loads are anticipated;
- Adequate surface water management structures will be installed to ensure appropriate fold protection;
- Procedures will be implemented to ensure vehicles and equipment arriving on site will be in a clean condition, free of soil and vegetative matter;
- Where weeds are identified, an appropriate eradication procedure will be implemented;
- All available topsoil will be stripped from surfaces that will be disturbed and stored for use in future rehabilitation;
- Where practicable, the duration that topsoil is stockpiled will be minimised to reduce loss of seed viability and soil biota;
- Cleared vegetation will be stockpiled for future use in rehabilitation;
- Progressively throughout mining activities, stockpiled topsoil and vegetation will be spread over disturbed areas to act as a seed source, mulch to protect soil from erosion and habitat for fauna; and
- Standard dust suppression techniques will be used on stockpiles, roads and exposed infrastructure areas that generate dust.

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

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

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 6085/1, except in the case of clearing principle (a), as discussed further below.

3.2.1. Biological values (flora and priority ecological communities) - Clearing Principle (a)

Assessment

Flora

Seven conservation significant flora species were recorded within the local area (20 kilometre radius) of the application area, with four of these recorded within the application area (Maia, 2012, 2013; GIS Database). None of these species are endemic to the area (Thompson and Sheehy, 2011; Western Australian Herbarium, 1998-)

The three species not found within the application area are *Euryomyrtus inflata* (P3), *Eremophila pungens* (P4) and *Grevillea inconspicua* (P4) (Maia, 2012, 2013; GIS Database). All of these species may have suitable habitat within the application area, and it is likely they would have been recorded during surveys of the area (Maia, 2012, 2013). However, due to the age of the

surveys (2012 and 2013) it is possible that new populations and individuals of these species and other not previously recorded conservation significant flora species could have germinated within the application area.

Four Priority Flora species within the application area; *Stenanthemum mediale* (P1), *Acacia burrowsiana* (P3), *Calytrix praecipua* (P3) and *Sauropus ramosissimus* (P3). None of the 21 recorded populations of *Stenanthemum mediale* on FloraBase are within conservation areas with populations varying from isolated individuals to 20 plants (Western Australian Herbarium, 1998-). However, the company has stated that infrastructure has been designed to avoid all known locations of *Stenanthemum mediale* (MBS Environmental, 2015).

There were four locations of *Acacia burrowsiana* recorded within the application area with a total of five plants identified (Maia, 2012, 2013). There are 28 records of this species recorded on FloraBase, with the number of plants recorded varying from 3 to 3,000 plants (Western Australian Herbarium, 1998-). Given that the proposed clearing will only impact three individuals, it is unlikely that the conservation significance of this species will be impacted (Panoramic Gold, 2014).

There were 10 locations of *Calytrix praecipua* recorded within the application area with a total of 81 plants identified (Maia, 2012; 2013). There are 28 records of this plant on FloraBase, with the number of plants recorded varying from six to 30 plants ((Western Australian Herbarium, 1998-). Given the known records of the species within the local and regional area, that are in association with widespread vegetation type WL7, the proposed clearing of 50 individuals is unlikely to significantly impact this species (Panoramic Gold, 2014).

There were eight locations of *Sauropus* sp. Woolgorong (M. Officer s.n. 10/8/94) (previously named *Sauropus ramosissimus*) recorded within the application area with a total of eight plants identified (Maia, 2012; 2013). There are 36 records of this plant recorded on FloraBase, with the number of plants recorded varying from scattered individuals to 100 plants within a population ((Western Australian Herbarium, 1998-). The proposed clearing is unlikely to impact any individuals as the current disturbance footprint does not intercept this Priority Flora species (Panoramic Gold, 2014).

Due to the age of the surveys (2012 and 2013) and the potential of new populations and individuals of the above mentioned species to have germinated and spread throughout the application area since the area was surveyed, clearing may significantly impact these species. Furthermore, due to clearing not having been conducted yet within the application area under the previous permit, there is increased likelihood that the recorded populations have changed since the previous surveys (Maia, 2012, 2013; Gum Creek, 2024). Potential impacts from this may be minimised by a flora management condition to conduct a targeted flora survey for Threatened and Priority flora within the application area, with no clearing allowed within a buffer of the identified conservation significant flora without secondary approval.

There was one weed species identified during the surveys, *Portulaca oleracea*, no weeds of national environmental significance were found (Maia, 2012, 2013). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Priority Ecological Communities

The northern portion of the application area is located within the buffer for the Montague Range vegetation complexes (banded ironstone formation) Priority Ecological Community (PEC) (Priority 1) (GIS Database). There were no banded ironstone formations recorded within the application area (Maia, 2012; 2013; Western Wildlife, 2013). Vegetation type WL7 is floristically similar to the PEC, and vegetation type WL8 shares some species occurring in the PEC (Maia, 2013). However, both vegetation types have been mapped extensively in the survey areas surrounding the application area to the north and south and are therefore not endemic to the PEC (Maia, 2012; 2013).

There is 103.96 hectares of vegetation type WL7 recorded within the application area however, surveys of the surrounding area have recorded a further 889 hectares of WL7 (Maia, 2012, 2013). Approximately 11.69 percent of this vegetation type exists within the application area, however only 24.6 hectares of WL7 is proposed to be cleared, which represents 2.48 percent of the total area of WL7 surveyed by Maia (2012; 2013; MBS, 2015).

The application area only contains 0.86 hectares of vegetation type WL8 and was found to contain no conservation significant species within (Maia, 2013). Previously, 174.3 hectares has been recorded in the surrounding area, equating to a percentage impact of only 0.48 percent, however Gum Creek have planned no disturbance of vegetation type WL8 (Maia, 2013; MBS, 2015).

None of the floristic community types on the PEC are specifically described as conservation significant by the DEC, instead they are described as important repositories of taxa of conservation significance, however none of these taxa are endemic to the PEC (Thompson and Sheehy, 2011; Maia, 2013). If conservation significant species are avoided as per a flora management condition, impact to Montague Range vegetation complexes can be minimised to an acceptable level.

Conclusion

Based on the above assessment, it is considered that the impacts of the proposed clearing on conservation significant flora can be managed by flora management conditions to avoid clearing identified *Stenanthemum mediale* and to conduct a targeted flora survey across the application area prior to clearing.

Conditions

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

- avoid and minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- avoid the clearing of identified Priority flora species *Stenanthemum mediale*; and

- conduct a targeted flora survey across the application area prior to clearing to avoid impacting unidentified conservation significant flora species.

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

Assessment

The 'mulga woodlands on plains' faunal habitat type is suitable habitat for *Leipoa ocellata* (malleefowl) (Benshemesh, 2007; Western Wildlife, 2013). Other habitats are unlikely to be suitable as they lack leaf litter and are generally quite open, rather than shrubby (Western Wildlife, 2013). Extensive searching for malleefowl during fauna surveys of the application area and the immediate surrounds failed to find any evidence of malleefowl, such as tracks or mounds (Western Wildlife, 2013). Despite two records of malleefowl mounds within the local area (20 kilometres) these are both outdated as they are from 1996, and although the malleefowl can be locally common, it is rare in much of its range, and may be locally extinct in the vicinity of the study area as the application is at the northern edge of its current distribution (Benshemesh, 2007; Western Wildlife, 2013; GIS Database).

Falco peregrinus (peregrine falcon) has been recorded within the application area (Western Wildlife, 2013). This species often takes advantage of man-made structures such as abandoned open pits and was recorded near an open pit in the southern area portion of the application area (Western Wildlife, 2013). Given that the species is highly mobile and has a large distribution, the proposed clearing of 100 hectares of native vegetation, which is well represented within the surrounding region and a portion of which is completely degraded, is unlikely to significantly impact the conservation significance of this species (Western Wildlife, 2013).

Amytornis striatus striatus (striated grasswren (sandplain)) live on sandplains dominated by mature *Triodia* hummock grassland with an overstorey of shrubs, usually mallee eucalypts which is not found within the application area (Garnett and Crowley, 2000; Western Wildlife, 2013). Due to the lack of suitable habitat within the application area and the mobile nature of the species, it is unlikely that they will be impacted by the proposed clearing (Garnett and Crowley, 2000; Western Wildlife, 2013).

Whilst not recorded within the application area or the local area (20 kilometre radius), potential habitat within the known distribution of *Dasyercus blythi* (brush-tailed mulgara) occurs within the application area (Western Wildlife, 2013). However, the habitat types present in the application area, specifically the mulga woodlands that may be suitable for these species, are common and widespread in the surrounding region (Western Wildlife, 2013; GIS Database). Due to this and the lack of records within the local area, it is unlikely that the proposed clearing will significantly impact this species.

A subterranean fauna and habitat assessment survey was also conducted, however no species were recorded within the application area (MBS, 2013).

Conclusion

Based on the above assessment, it is considered that the impacts of the proposed clearing on conservation significant fauna can be managed by slow directional clearing to allow fauna to move into adjacent vegetation.

The applicant may have notification responsibilities under the EPBC Act for impacts to *Leipoa ocellata* (malleefowl) and their habitats, as set out in the EPBC Act referral guidelines. The applicant has been advised to contact the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) to discuss EPBC Act referral requirements.

Conditions

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

- slow one-directional clearing to allow *Leipoa ocellata* (malleefowl) and *Dasyercus blythi* (brush tailed mulgara) to move into adjacent vegetation ahead of the clearing activity, minimising the impact to individuals.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 31 May 2024 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over part of the area under application (DPLH, 2024). This claim has been determined by the Federal Court on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2024). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is noted that the proposed clearing may impact on *Leipoa ocellata* (malleefowl), which is a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of Climate Change, Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water and the Environment for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan 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 vegetation and landscape of the Eastern Murchison region and is adjacent to other historical mining developments.
Ecological linkage	The proposed clearing does not represent any mapped ecological linkages or informal linkages (GIS Database). The proposed area is not a significant remnant of native vegetation in an area that has been extensively cleared and is unlikely to provide an ecological linkage to surrounding areas (GIS Database).
Conservation areas	There are no conservation areas within the vicinity of the application area (GIS Database). The closest mapped conservation area is the ex-Kaluwiri pastoral lease, approximately 5 kilometres from the application area, which is now a DBCA interested land 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>39: Shrublands; mulga scrub. (GIS Database).</p> <p>Flora and vegetation surveys have been conducted over the application area by Maia Environmental Consultancy during November 2011 and March 2013. The following vegetation associations were recorded within the application area (Maia, 2012; 2013):</p> <p>WL1 – Sparse low woodland of <i>Acacia aneura</i> complex with a sparse to open tall shrubland of <i>A. ramulosa</i> var. <i>linophylla</i> and/or <i>A. minyura</i> and a mixed sparse low shrubland;</p> <p>WL2 – Sparse low woodland of <i>Acacia aneura</i> complex with a mixed isolated low shrubland;</p> <p>WL6 – Open low woodland of <i>Acacia aneura</i> complex and/or <i>A. ayersiana</i> with a sparse mid shrubland of <i>A. tetragonophylla</i> and/or <i>A. craspedocarpa</i> and a sparse low shrubland of <i>Ptilotus obovatus</i>;</p> <p>WL7 – Sparse low woodland of <i>Acacia aneura</i> complex with a sparse tall shrubland of <i>A. aneura</i> complex +/- <i>A. quadrimarginea</i> and sparse low shrubland of <i>Eremophila jucunda</i> subsp. <i>jucunda</i> +/- <i>E. latrobei</i> subsp. <i>latrobei</i>;</p> <p>WL8 – Open tall shrubland of <i>Acacia xanthocarpa</i> with isolated low trees of <i>Acacia aneura</i> complex and isolated low shrubs of <i>Prostanthera althoferi</i> subsp. <i>althoferi</i> and <i>Eremophila exilifolia</i>;</p> <p>SL1 – Sparse mid shrubland of <i>Eremophila pantonii</i> and <i>E. oppositifolia</i> subsp. <i>angustifolia</i> with a sparse low shrubland of <i>Solanum lasiophyllum</i> and <i>Ptilotus obovatus</i> and scattered low trees of <i>Acacia aneura</i> complex and/or <i>A. tetragonophylla</i>;</p> <p>SL2 – Open tall shrubland of <i>Acacia xanthocarpa</i> with a sparse mid shrubland of <i>Eremophila exilifolia</i> with a sparse low shrubland of +/- <i>Aluta maisonneuvei</i> subsp. <i>maisonneuvei</i>; and</p> <p>CSL – Sparse to open chenopod shrubland of <i>Sclerolaena cuneata</i> and <i>Maireana triptera</i> with a sparse low shrubland of <i>Eremophila maculata</i> subsp. <i>brevifolia</i> and scattered trees of <i>Acacia aneura</i> complex.</p>
Vegetation condition	<p>The vegetation surveys (Maia, 2012; 2013) and aerial imagery indicate the vegetation within the proposed clearing area is in excellent to completely degraded (Trudgen, 1991) condition, described as;</p> <ul style="list-style-type: none"> • 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. • 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. <p>The full Trudgen (1991) condition rating scale is provided in Appendix C.</p>

Characteristic	Details
Climate and landform	The application area is located within an arid zone with an average annual rainfall (Murchison Downs Station) of approximately 222.6 millimetres (BoM, 2024). The area is relatively flat topographically, consisting of primarily hardpan plains and irregular low ironstone hills (DPIRD, 2024).
Soil description	The soils within the application area are mapped as the following soil map units (DPIRD, 2024); 279Bv: Chief soils of red shallow loam, with smaller areas of stony soil and red shallow sandy duplex. 279Fx: Chief soils of red shallow loam and red loamy earths, with smaller areas of red shallow sandy duplex and red deep sand. 279Gr: Chief soils of red shallow sandy duplex and red shallow sand, other soils of red shallow loam and red deep sand also present. 279Ju: Chief soils of red shallow loam with red loamy earth, with smaller areas of red/brown non-cracking clay and red deep sand.
Land degradation risk	The application area falls within the Bevon, Felix, Gransal and Jundee land systems (DPIRD, 2024). These land systems are described by Payne et al. (1998) as: Bevon: Irregular low ironstone hills with stony lower slopes supporting mulga shrublands. Minor areas with texture contrast soils on breakaway footslopes and narrow drainage tracts are susceptible to soil erosion, particularly if perennial shrub cover is substantially reduced or the soil surface is disturbed. Felix: Gently undulating plains with quartz mantles, supporting <i>Acacia</i> and <i>Eremophila</i> shrublands. Stone mantles provide effective protection of the soil against erosion. Gransal: Stony plains and low rises on granite, supporting mainly halophytic shrublands. Footslopes below breakaways, saline stony plains and alluvial plains are moderately susceptible to water erosion in areas where perennial shrub cover is substantially reduced. Disturbance of surface on these units is likely to initiate soil erosion. Jundee: Hardpan wash plains with ironstone mantles and occasional sandy banks supporting mulga shrublands. Alteration to natural sheet flows and severe vegetation degradation can initiate soil erosion and cause water starvation and consequent loss of vigour in vegetation downslope.
Waterbodies	The desktop assessment and aerial imagery indicated that there are several 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 (GIS Database). The mapped groundwater salinity of the application area is 1,000-3,000 milligrams per litre total dissolved solids which is described as brackish to saline (GIS Database). Smaller sections of the application area have a mapped groundwater salinity of 500-1,000 milligrams per litre total dissolved solids which is described as marginal (GIS Database).
Flora	No Threatened flora were recorded within the application area or within the local (20 kilometre radius) of the application area (Maia, 2012, 2013; GIS Database). A desktop assessment of available databases and survey information identifies seven Priority flora species within the local area, four of which have records within the application area (Maia, 2012, 2013; GIS Database).
Ecological communities	One Priority Ecological Community (PEC) is mapped within the northern portion of the application area (GIS Database). The Priority 1 PEC present is the Montague Range vegetation complexes (banded ironstone formation) (GIS Database). No Threatened Ecological Communities (TECs) are mapped within the application area (GIS Database).
Fauna	There is one record of a conservation significant fauna species within the application area (Western Wildlife, 2013; GIS Database). There are a further two conservation significant fauna species that have records within the local area (20 kilometres) and are considered possible to occur within the application area (Western Wildlife, 2013; GIS Database).
Fauna habitat	The following six faunal habitats were recorded within the application area by Western Wildlife (2013): Mulga Woodlands on Low Rocky Hills - dominated by <i>Acacia aneura</i> and occur on rocky hillslopes, hillcrests and outcrops, as well as stony plains. The understorey includes sparse tall shrubs such as Curara (<i>Acacia tetragonophylla</i>) or <i>Acacia balsamea</i> , and a sparse shrubland of <i>Eremophila</i> spp. and <i>Senna artemisioides</i> ; Mulga Woodland on Plain - dominated by <i>Acacia aneura</i> and occurs on a range of hardpan, stony quartz, laterite and ironstone plains. The understorey in parts has a sparse tall shrubland of species such as Bowgada (<i>Acacia ramulosa</i>) and/or <i>Acacia minyura</i> . The understorey also usually consists of a sparse low shrubland of <i>Eremophila</i> spp., <i>Acacia ayersiana</i> , Curara (<i>Acacia tetragonophylla</i>), Hop Mulga (<i>Acacia craspedocarpa</i>) and/or Cotton Bush (<i>Ptilotis obovatus</i>); Acacia Shrublands on Low Rocky Hills - The <i>Acacia</i> shrubland occurs on the low rocky hills of dolerite and laterite and is dominated by <i>Acacia xanthocarpa</i> over <i>Eremophila exilifolia</i> , <i>Eremophila forrestii</i> and Cotton Bush (<i>Ptilotis obovatus</i>);

Characteristic	Details
	<p>Chenopod Shrubland - The Chenopod shrubland occurred mainly on quartz stony plains and consisted of Yellow Bindi (<i>Sclerolaena cuneata</i>), Three-winged Bluebush (<i>Maireana triptera</i>) and Fuchsia Bush (<i>Eremophila maculata</i>), with scattered Mulga (<i>Acacia aneura</i>); and</p> <p>Sparse Shrubland - The sparse shrubland occurred mainly on undulating calcrete plains and hardpan plains. The shrubland consists of sparse <i>Eremophila pantonii</i>, <i>Eremophila oppositifolia</i>, Flannel Bush (<i>Solanum lasiophyllum</i>) and Cotton Bush (<i>Ptilotus obovatus</i>). There are also scattered Mulga (<i>Acacia aneura</i>) trees.</p> <p>Cleared or Highly Disturbed Areas – Generally areas associated with past mining activities including, areas of open pits, waste dumps, the camp, roads, workshop and other infrastructure areas.</p>

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information (Maia, 2012, 2013), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Acacia burrowsiana</i>	P3	Y	Y	Y	0.00	28	Y
<i>Calytrix praecipua</i>	P3	Y	Y	Y	0.00	28	Y
<i>Eremophila pungens</i>	P4	N	Y	Y	1.45	45	Y
<i>Euryomyrtus inflata</i>	P3	N	Y	N	7.17	12	Y
<i>Grevillea inconspicua</i>	P4	Y	Y	N	7.54	61	Y
<i>Sauropus</i> sp. Woolgorong (M. Officer s.n. 10/8/94)	P3	Y	Y	Y	0.00	36	Y
<i>Stenanthemum mediale</i>	P1	Y	Y	Y	0.00	21	Y

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

A.3. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information (Western Wildlife, 2013), impacts to the following conservation significant fauna required further consideration.

Species name	Conservation status	Suitable habitat?	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Amytornis striatus striatus</i> (striated grasswren (sandplain))	P4	N	19.03	73	Y
<i>Dasyercus blythi</i> (brush-tailed mulgara)	P4	Y	46.41	1,216	Y
<i>Falco peregrinus</i> (peregrine falcon)	OS	Y	0.00	1,786	Y
<i>Leipoa ocellata</i> (malleefowl)	VU	Y	8.67	29,638	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority, OS: Other Specially Protected

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		

Assessment against the clearing principles	Variance level	Is further consideration required?
<p>Principle (a): <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p>Assessment: Seven conservation significant flora species were recorded within the local area (20 kilometre radius) of the application area, with four of these recorded within the application area (Maia, 2012, 2013; GIS Database). One Priority Ecological Community (PEC) Montague Range vegetation complexes (banded ironstone formation) also intersects the northern portion of the application area.</p>	<p>May be at variance</p> <p><i>(changed from CPS 6085/1)</i></p>	<p>Yes</p> <p><i>Refer to Section 3.2.1, above.</i></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: The area proposed to be cleared may contain potential habitat for five different conservation significant fauna species (Western Wildlife, 2013; GIS Database). These fauna habitats are common and widespread in the local area and extend well beyond the application area, however no recent fauna surveys have been conducted within the application area (Western Wildlife, 2013; GIS Database).</p>	<p>Not likely to be at variance</p> <p><i>as per CPS 6085/1)</i></p>	<p>Yes</p> <p><i>Refer to Section 3.2.2, above.</i></p>
<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: There are no records of Threatened flora within the application area or within the local area (20 kilometres), and no Threatened flora were found during flora and vegetation surveys (Maia, 2012, 2013; GIS Database).</p>	<p>Not likely to be at variance</p> <p><i>(as per CPS 6085/1)</i></p>	<p>No</p>
<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: There are no known Threatened Ecological Communities (TECs) within or in close proximity to the area proposed to be cleared (GIS Database). The vegetation types mapped within the application area are not representative of any TECs (Maia, 2012, 2013).</p>	<p>Not likely to be at variance</p> <p><i>(as per CPS 6085/1)</i></p>	<p>No</p>
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: The application area falls within the Murchison bioregion of the Interim Biogeographic Regionalisation of Australia (GIS Database). Over 99 percent 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 39 (GIS Database). Both of these vegetation associations have not been extensively cleared as over 99 per cent of the pre-European extent of these vegetation associations remain uncleared at the state and bioregional level (Government of Western Australia, 2019).</p>	<p>Not at variance</p> <p><i>(as per CPS 6085/1)</i></p>	<p>No</p>
<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: Given the distance to the nearest conservation area (five kilometres), the proposed clearing is not likely to have an impact on the environmental values of any nearby conservation areas (GIS Database).</p>	<p>Not likely to be at variance</p> <p><i>(as per CPS 6085/1)</i></p>	<p>No</p>
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: There are no permanent watercourses or wetlands within the application area (GIS Database). Multiple minor non-perennial drainage lines intersect the application area (GIS Database). The proposed clearing has the potential to impact vegetation growing in association with these drainage lines. These impacts can be managed through a vegetation management condition on the clearing permit to avoid clearing of riparian vegetation where possible and maintain water flows.</p>	<p>At variance</p> <p><i>(changed from CPS 6085/1)</i></p>	<p>No</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: The mapped land systems where the application area is located have variable degrees of susceptibility to erosion, particularly along drainage lines when degraded (refer to Appendix A). Due to the large area of native vegetation proposed</p>	<p>May be at variance</p> <p><i>(as per CPS 6085/1)</i></p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
to be cleared (100 hectares), the proposed clearing is likely to have an appreciable impact on land degradation. These impacts can be managed through a staged clearing condition on the clearing permit to prevent cleared areas from being exposed for long periods of time.		
<p>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."</p> <p>Assessment: There are no permanent watercourses, wetlands or Public Drinking Water Source Areas recorded within the application area (GIS Database). There are multiple non-perennial drainage lines intersecting the application area and a staged clearing condition and vegetation management condition will reduce the impacts of erosion and minimise potential run off (GIS Database). The proposed clearing is unlikely to impact the quality of surface or underground water.</p>	Not likely to be at variance <i>(as per CPS 6085/1)</i>	No
<p>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."</p> <p>Assessment: There are no permanent watercourses or wetlands within the application area (GIS Database). The soils within the application area are relatively permeable and it is expected that most rainfall will rapidly infiltrate the soil (GIS Database). Due to the soil characteristics, climate and sporadic, low rainfall in the region it is unlikely that the proposed clearing will increase the incidence or intensity of flooding (BoM, 2024; GIS Database).</p>	Not likely to be at variance <i>(as per CPS 6085/1)</i>	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 databases

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

- Aboriginal Heritage Places (DPLH-001)
- Contours (DPIRD-073)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)

- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Pre-European Vegetation Statistics
- Regional Parks (DBCA-026)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

D.2. References

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- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Murchison Downs Station. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 28 March 2024).
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
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- Department of Primary Industries and Regional Development (DPIRD) (2024) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://dpird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 28 May 2024).
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- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf
- Garnett, S. and Crowley, G. (2000). *The Action Plan for Australian Birds: 2000*, 1st edition, Environment Australia, Australia.
- 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>
- Gum Creek Gold Mines Pty Ltd (Gum Creek) (2024) Clearing permit application form, CPS 6085/2, received 18 April 2024.
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- MBS Environmental (MBS) (2013) Gidgee Gold Project, Subterranean Fauna Assessment. Prepared for Panoramic Gold Pty Ltd, September 2013.
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Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 10 June 2024).

Western Wildlife (2013) Gidgee Gold Project: Level 1 Vertebrate Fauna Survey November 2011 & March 2013. Prepared for Panoramic Resources Limited, June 2013.

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
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
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> (Federal 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 (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU

Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX

Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW

Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

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

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1

Priority One - Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2

Priority Two - Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3

Priority Three - Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

P4

Priority Four - Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

- (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.